IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#28 Brief

In re Application of:

Richard Graff

For: COMPUTERS MAKING FINANCIAL ANALYSIS OUTPUT HAVING PROPERTY VALUATIONS

USSN: 09/134,453

Filed: August 14, 1998

Group Art Unit: 2761

Examiner: N. Rosen

APPEAL BRIEF

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APPEAL BRIEF

S I R:

This is an appeal from the decision of the Primary Examiner finally rejecting all claims pending in the above-identified application of February 16, 2001.

I. Real Party In Interest

Appellant, Graff/Ross Holdings, is the real party in interest.

II. Related Appeals and Interferences

There are no related appeals or interferences.

III. Status of All Claims

Claims 1-75, 80-101, 104-180, and 226-257 have been rejected.

Claims 76-79, and 102-103 have been allowed.

IV. Status of All Amendments Filed Subsequent to Final Rejection

Four amendments filed subsequent to Final Rejection on April 15, 2002, have been graciously entered into the application.

V. Concise Summary of the Invention

The invention is directed to a particular method of making certain financial analysis output with digital electrical computer means. In one embodiment, the method steps include

producing a system-generated purchase price and an offering document in connection with consummating a sale of at least one security. In a multi-computer embodiment, method steps include controlling a first computer in generating output including a first valuation for property, communicating some output to a second computer, which uses that output in producing a second valuation. The valuations, typically market-based valuations, may differ in that the first usually reflects at least one from a group consisting of expected return under a performance scenario, a price, and a quantitative description of risk; in some claims, the second valuation involves computation of a current market-based yield/discount rate. Both valuations pertain to the same property, and depending on the claim, the property can be a tax-exempt security, a portfolio of tax-exempt securities, a property not including any securities, a fixed-income asset, a portfolio of fixed-income assets, real estate, and tangible personal property. (Those claims pertaining to the tangible personal property have been allowed.)

VI. Reading of Claims on the Specification

The claims read on the specification as follows:

1. A method for making financial analysis output having a second computed market-based valuation for property, the financial analysis output being made by steps including:	...outputting Financial Analysis...Pg. 28, Ln. 1 Thus market-based component valuation...Pg. 7, Ln. 12.
controlling a digital electrical computer processor to manipulate electrical signals in generating a market-based valuation for the property, wherein the property is from a group consisting of a tax-	The computer system includes a digital electrical...decomposed from the property. Pg. 23, Lns. 29-31 to Pg. 24, Ln. 1 Thus market-based component valuation...Pg. 7, Ln. 12.

exempt security and a portfolio of tax-exempt securities, the market-based valuation reflecting at least one from a group consisting of expected return under a performance scenario, a price, and a quantitative description of risk, as part of a financial analysis output;	...the property is a tax-exempt security... Pg. 24, Lns. 22-23 This information can include the expected returns under various performance scenarios...prices under various scenarios. Pg. 33, Lns. 14-16.
electronically communicating at least some of the financial analysis output as input to a second digital electrical computer having a second programmed processor, the second digital electrical computer storing the input in memory accessible to the second programmed processor;	This data can be communicated electronically... Pg. 56, Ln. 5 ...a second digital electrical computer...provided to a component buyer. Pg. 56, Lns. 18-21
generating the second market-based valuation reflecting computation of a current market-based yield/discount rate for the property with the second digital electrical computer and the input; and	...structurally analogous to that of...generated by the component. Pg. 61, Lns. 9-14
generating a second financial analysis output, including the second market-based valuation, at an output means electrically connected to said	More particularly, Computer System 248 can be characterized as providing a... signals into an illustration of data corresponding to the other modified electrical signals. Pg. 61, Ln. 21 – Pg.

second digital electrical computer.	62 Ln. 8
2. A method for making financial analysis output including a second computed market-based valuation for property, the method including the steps of:	...outputting Financial Analysis...Pg. 28, Ln. 1 Thus market-based component valuation...Pg. 7, Ln. 12.
controlling a digital electrical computer processor to manipulate electrical signals in generating a market-based valuation for the property, not including any securities, the market-based valuation reflecting at least one from a group consisting of expected return under a performance scenario, a price, and a quantitative description of risk, as part of a financial analysis output;	...a digital electrical...decomposed from the property. Pg. 23, Lns. 29-31 to Pg. 24, Ln. 1 Thus market-based component valuation...Pg. 7, Ln. 12. This information can include the expected returns under various performance scenarios...prices under various scenarios. Pg. 33, Lns. 14-16.
electronically communicating at least some of the financial analysis output as input to a second digital electrical computer having a programmed processor, the second digital electrical computer storing the input in memory accessible to the programmed processor corresponding to the second digital	This data can be communicated electronically... Pg. 56, Ln. 5 ...a second digital electrical computer...provided to a component buyer. Pg. 56, Lns. 18-21

electrical computer;

generating a second market-based valuation for the property with the second digital electrical computer and the input; and

...structurally analogous to that of...generated by the component. Pg. 61, Lns. 9-14

generating the second financial analysis output, including the second market-based valuation, at an output device electrically connected to said second digital electrical computer.

More particularly, Computer System 248 can be characterized as providing a... signals into an illustration of data corresponding to the other modified electrical signals. Pg. 61, Ln. 21 – Pg. 62 Ln. 8

3. A method for making financial analysis output having a second computed market-based valuation for property, the financial analysis output being made by steps including:

...outputting Financial Analysis...Pg. 28, Ln. 1 Thus market-based component valuation...Pg. 7, Ln. 12.

controlling a digital electrical computer processor to manipulate electrical signals in generating a market-based valuation for the property, wherein the property is from a group consisting of a fixed-income asset and a portfolio of fixed-income assets, the market-based valuation reflecting at least one from a group

...includes a digital electrical...decomposed from the property. Pg. 23, Lns. 29-31 to Pg. 24, Ln. 1 Thus market-based component valuation...Pg. 7, Ln. 12.

... every financial asset in the present embodiment... is treated as a fixed-income asset...Pg. 46, Lns. 24-25.

consisting of expected return under a performance scenario, a price, and a quantitative description of risk, as part of a financial analysis output;	This information can include the expected returns under various performance scenarios...prices under various scenarios. Pg. 33, Lns. 14-16.
electronically communicating at least some of the financial analysis output as input to a second digital electrical computer having a second programmed processor, the second digital electrical computer storing the input in memory accessible to the second programmed processor;	This data can be communicated electronically... Pg. 56, Ln. 5 ...a second digital electrical computer...provided to a component buyer. Pg. 56, Lns. 18-21
generating the second market-based valuation reflecting computation of a current market-based yield/discount rate for the property with the second digital electrical computer and the input; and	...structurally analogous to that of...generated by the component. Pg. 61, Lns. 9-14
generating a second financial analysis output, including the second market-based valuation, at an output means electrically connected to said second digital electrical computer.	More particularly, Computer System 248 can be characterized as providing a... signals into an illustration of data corresponding to the other modified electrical signals. Pg. 61, Ln. 21 – Pg. 62 Ln. 8
4. The method of claim 3,	Ownership of leased property is a fixed-income

wherein the step of controlling is carried out with corporate debt as at least one of said fixed-income assets.	asset...the market for corporate debt...Pg. 4, Lns. 27-28.
5. The method of claim 3, wherein the step of controlling is carried out with a security for debt as at least one of said fixed-income assets.	...every financial asset in the present embodiment...is treated as a fixed-income asset...Pg. 46, Lns. 24-25.
6. The method of claim 5, wherein the step of controlling is carried out with corporate debt as the debt.	Ownership of leased property is a fixed-income asset...the market for corporate debt...Pg. 4, Lns. 27-28.
7. The method of claim 3, wherein the step of controlling is carried out with a Treasury security as at least one of said fixed-income assets.	...yield on Treasury securities of comparable... Pg. 28, Ln. 9
8. The method of claim 3, wherein the step of controlling is carried out with a tax-exempt security as at least one of said fixed-income assets.	...the property is a tax-exempt security. Pg. 24, Lns. 22-23
9. A method for making financial	

analysis output having a second computed market-based valuation for property, the financial analysis output being made by steps including:	...outputting Financial Analysis...Pg. 28, Ln. 1 Thus market-based component valuation...Pg. 7, Ln. 12.
controlling a digital electrical computer processor to manipulate electrical signals in generating a market-based valuation for the property wherein the property is a fixed-income asset, the market-based valuation reflecting at least one from a group consisting of expected return under a performance scenario, a price, and a quantitative description of risk, as part of a financial analysis output;	...includes a digital electrical...decomposed from the property. Pg. 23, Lns. 29-31 to Pg. 24, Ln. 1 Thus market-based component valuation...Pg. 7, Ln. 12. ... every financial asset in the present embodiment... is treated as a fixed-income asset...Pg. 46, Lns. 24-25.
electronically communicating at least some of the financial analysis output as input to a second digital electrical computer having a second programmed processor, the second digital electrical computer storing the input in memory accessible to the second programmed processor;	This information can include the expected returns under various performance scenarios...prices under various scenarios. Pg. 33, Lns. 14-16. This data can be communicated electronically... Pg. 56, Ln. 5 ...a second digital electrical computer...provided to a component buyer. Pg. 56, Lns. 18-21
generating the second market-based valuation reflecting computation of a	...structurally analogous to that of...generated by the component. Pg. 61, Lns. 9-14

current market-based yield/discount rate for the property with the second digital electrical computer and the input; and

generating a second financial analysis output, including the second market-based valuation, at an output means electrically connected to said second digital electrical computer.

More particularly, Computer System 248 can be characterized as providing a... signals into an illustration of data corresponding to the other modified electrical signals. Pg. 61, Ln. 21 – Pg. 62 Ln. 8

10. The method of claim 9, wherein the step of controlling is carried out with a corporate debt as the fixed-income asset.

Ownership of leased property is a fixed-income asset...the market for corporate debt...Pg. 4, Lns. 27-28.

11. The method of claim 9, wherein the step of controlling is carried out with a security for debt as the fixed-income asset.

...every financial asset in the present embodiment...is treated as a fixed-income asset...Pg. 46, Lns. 24-25.

12. The method of claim 11, wherein the step of controlling is carried out with corporate debt as the debt.

Ownership of leased property is a fixed-income asset...the market for corporate debt...Pg. 4, Lns. 27-28.

13. The method of claim 9,

...yield on Treasury securities of comparable...

wherein the step of controlling is carried out with a Treasury security as the fixed-income asset.	Pg. 28, Ln. 9
14. The method of claim 9, wherein the step of controlling is carried out with a tax-exempt security as the fixed-income asset.	...the property is a tax-exempt security. Pg. 24, Lns. 22-23.
15. The method of claim 1, wherein the step of controlling is carried out with the expected return under a performance scenario as part of the first financial analysis output.	...expected returns under the various performance scenarios...Pg. 33, Ln. 19
16. The method of claim 2, wherein the step of controlling is carried out with the expected return under a performance scenario as part of the first financial analysis output.	...expected returns under the various performance scenarios...Pg. 33, Ln. 19
17. The method of claim 3, wherein the step of controlling is carried out with the expected return under a	...expected returns under the various performance scenarios...Pg. 33, Ln. 19

performance scenario as part of the first financial analysis output.

18. The method of claim 4, wherein the step of controlling is carried out with the expected return under a performance scenario as part of the first financial analysis output.

...expected returns under the various performance scenarios...Pg. 33, Ln. 19

19. The method of claim 5, wherein the step of controlling is carried out with the expected return under a performance scenario as part of the first financial analysis output.

...expected returns under the various performance scenarios...Pg. 33, Ln. 19

20. The method of claim 6, wherein the step of controlling is carried out with the expected return under a performance scenario as part of the first financial analysis output.

...expected returns under the various performance scenarios...Pg. 33, Ln. 19

21. The method of claim 7, wherein the step of controlling is carried out with the expected return under a

...expected returns under the various performance scenarios...Pg. 33, Ln. 19

performance scenario as part of the first financial analysis output.

22. The method of claim 8, wherein the step of controlling is carried out with the expected return under a performance scenario as part of the first financial analysis output.

...expected returns under the various performance scenarios...Pg. 33, Ln. 19

23. The method of claim 9, wherein the step of controlling is carried out with the expected return under a performance scenario as part of the first financial analysis output.

...expected returns under the various performance scenarios...Pg. 33, Ln. 19

24. The method of claim 10, wherein the step of controlling is carried out with the expected return under a performance scenario as part of the first financial analysis output.

...expected returns under the various performance scenarios...Pg. 33, Ln. 19

25. The method of claim 11, wherein the step of controlling is carried out with the expected return under a

...expected returns under the various performance scenarios...Pg. 33, Ln. 19

performance scenario as part of the first financial analysis output.

26. The method of claim 12, wherein the step of controlling is carried out with the expected return under a performance scenario as part of the first financial analysis output.

...expected returns under the various performance scenarios...Pg. 33, Ln. 19

27. The method of claim 13, wherein the step of controlling is carried out with the expected return under a performance scenario as part of the first financial analysis output.

...expected returns under the various performance scenarios...Pg. 33, Ln. 19

28. The method of claim 14, wherein the step of controlling is carried out with the expected return under a performance scenario as part of the first financial analysis output.

...expected returns under the various performance scenarios...Pg. 33, Ln. 19

29. The method of claim 1, wherein the step of controlling is carried out with the price as part of the first

..., the price,... Pg. 33, Ln. 15

financial analysis output.

30. The method of claim 2, wherein the step of controlling is carried out with the price as part of the first financial analysis output. ..., the price,... Pg. 33, Ln. 15

31. The method of claim 3, wherein the step of controlling is carried out with the price as part of the first financial analysis output. ..., the price,... Pg. 33, Ln. 15

32. The method of claim 4, wherein the step of controlling is carried out with the price as part of the first financial analysis output. ..., the price,... Pg. 33, Ln. 15

33. The method of claim 5, wherein the step of controlling is carried out with the price as part of the first financial analysis output. ..., the price,... Pg. 33, Ln. 15

34. The method of claim 6, wherein the step of controlling is carried ..., the price,... Pg. 33, Ln. 15

out with the price as part of the first financial analysis output.

35. The method of claim 7, wherein the step of controlling is carried out with the price as part of the first financial analysis output. ..., the price,... Pg. 33, Ln. 15

36. The method of claim 8, wherein the step of controlling is carried out with the price as part of the first financial analysis output. ..., the price,... Pg. 33, Ln. 15

37. The method of claim 10, wherein the step of controlling is carried out with the price as part of the first financial analysis output. ..., the price,... Pg. 33, Ln. 15

38. The method of claim 10, wherein the step of controlling is carried out with the price as part of the first financial analysis output. ..., the price,... Pg. 33, Ln. 15

39. The method of claim 11, ..., the price,... Pg. 33, Ln. 15

wherein the step of controlling is carried out with the price as part of the first financial analysis output.

40. The method of claim 12, wherein the step of controlling is carried out with the price as part of the first financial analysis output.

..., the price,... Pg. 33, Ln. 15

41. The method of claim 13, wherein the step of controlling is carried out with the price as part of the first financial analysis output.

..., the price,... Pg. 33, Ln. 15

42. The method of claim 14, wherein the step of controlling is carried out with the price as part of the first financial analysis output.

..., the price,... Pg. 33, Ln. 15

43. The method of claim 1, wherein the step of controlling is carried out with the quantitative description of risk as part of the first financial analysis output.

..., and various quantitative descriptions of risk,... Pg. 33, Lns. 15-16

44. The method of claim 2, wherein the step of controlling is carried out with the quantitative description of risk as part of the first financial analysis output.	..., and various quantitative descriptions of risk,... Pg. 33, Lns. 15-16
45. The method of claim 3, wherein the step of controlling is carried out with the quantitative description of risk as part of the first financial analysis output.	..., and various quantitative descriptions of risk,... Pg. 33, Lns. 15-16
46. The method of claim 4, wherein the step of controlling is carried out with the quantitative description of risk as part of the first financial analysis output.	..., and various quantitative descriptions of risk,... Pg. 33, Lns. 15-16
47. The method of claim 5, wherein the step of controlling is carried out with the quantitative description of risk as part of the first financial analysis output.	..., and various quantitative descriptions of risk,... Pg. 33, Lns. 15-16
48. The method of claim 6, wherein the step of controlling is carried out with the quantitative description of risk as part of the first financial analysis output.	..., and various quantitative descriptions of risk,... Pg. 33, Lns. 15-16

49. The method of claim 7, wherein the step of controlling is carried out with the quantitative description of risk as part of the first financial analysis output.	..., and various quantitative descriptions of risk,... Pg. 33, Lns. 15-16
50. The method of claim 8, wherein the step of controlling is carried out with the quantitative description of risk as part of the first financial analysis output.	..., and various quantitative descriptions of risk,... Pg. 33, Lns. 15-16
51. The method of claim 9, wherein the step of controlling is carried out with the quantitative description of risk as part of the first financial analysis output.	..., and various quantitative descriptions of risk,... Pg. 33, Lns. 15-16
52. The method of claim 10, wherein the step of controlling is carried out with the quantitative description of risk as part of the first financial analysis output.	..., and various quantitative descriptions of risk,... Pg. 33, Lns. 15-16
53. The method of claim 11, wherein the step of controlling is carried out with the quantitative description of risk	..., and various quantitative descriptions of risk,... Pg. 33, Lns. 15-16

as part of the first financial analysis output.

54. The method of claim 12, wherein the step of controlling is carried out with the quantitative description of risk as part of the first financial analysis output.	..., and various quantitative descriptions of risk,... Pg. 33, Lns. 15-16
55. The method of claim 13, wherein the step of controlling is carried out with the quantitative description of risk as part of the first financial analysis output.	..., and various quantitative descriptions of risk,... Pg. 33, Lns. 15-16
56. The method of claim 14, wherein the step of controlling is carried out with the quantitative description of risk as part of the first financial analysis output.	..., and various quantitative descriptions of risk,... Pg. 33, Lns. 15-16
57. A method for making financial analysis output including an offering document having a system-determined purchase price for property in consummating a sale, the financial analysis output being made by steps including:	The computer system uses as input data information obtained from a variety of sources, ...the property offering documents,... Pg. 15, Lns. 11-17, ...system-determined purchase price... Pg. 15, Ln. 23 ...transaction...can be consummated. Pg. 30, Lns. 29-30.

converting input data representing the property, including at least one security, into input digital electrical signals representing the input data;

providing a digital electrical computer system controlled by a processor electrically connected to receive said input digital electrical signals and electrically connected to an output means;

controlling the digital electrical computer processor to manipulate electrical signals to compute the system-determined purchase price for the property in consummating a sale; and

generating the financial analysis output including the offering document at said output means.

...input data information obtained from a variety of sources, ...the property offering documents, and the property...by such sources as Telerate Systems. Pg. 15, Lns. 11-17

...input means electrically connected...digital electrical signals ...providing...output means electrically connected...for receiving the other modified digital electrical signals... Pg. 62, Lns. 2-8.

The computer system includes a digital electrical...decomposed from the property. Pg. 23, Lns. 29-31 to Pg. 24, Ln. 1

... system-determined purchase price. Pg. 15, Ln. 22

insurance company weekly publications... property offering documents, and the property lease documents. Pg. 15, Lns. 13-14.

58. A method for making financial analysis output including an offering document having a system-determined purchase price for property in consummating a sale, the financial analysis output being made by steps

The computer system uses as input data information obtained from a variety of sources, ...the property offering documents,... Pg. 15, Lns. 11-17, ...system-determined purchase price... Pg. 15, Ln. 23

...transaction...can be consummated. Pg. 30,

including:	Lns. 29-30.
converting input data representing the property, wherein the property includes a fixed-income asset, into input digital electrical signals representing the input data;	...input data information obtained from a variety of sources, ...the property offering documents, and the property...by such sources as Telerate Systems. Pg. 15, Lns. 11-17
providing a digital electrical computer system controlled by a processor electrically connected to receive said input digital electrical signals and electrically connected to an output means;	...input means electrically connected...digital electrical signals ...providing...output means electrically connected...for receiving the other modified digital electrical signals... Pg. 62, Lns. 2-8.
controlling the digital electrical computer processor to manipulate electrical signals to compute the system-determined purchase price for the property in consummating a sale; and	The computer system includes a digital electrical...decomposed from the property. Pg. 23, Lns. 29-31 to Pg. 24, Ln. 1 ... system-determined purchase price. Pg. 15, Ln. 22
generating the financial analysis output including the offering document at said output means.	. ..insurance company weekly publications... property offering documents, and the property lease documents. Pg. 15, Lns. 13-14.
59. The method of claim 58, wherein the step of converting is carried out with a corporate debt as the fixed-income asset.	Ownership of leased property is a fixed-income asset...the market for corporate debt...Pg. 4, Lns. 27-28.

60. The method of claim 58, wherein the step of converting is carried out with a security for debt as the fixed-income asset.	...every financial asset in the present embodiment...is treated as a fixed-income asset...Pg. 46, Lns. 24-25.
61. The method of claim 60, wherein the step of converting is carried out with corporate debt as the debt.	Ownership of leased property is a fixed-income asset...the market for corporate debt...Pg. 4, Lns. 27-28.
62. The method of claim 58, wherein the step of converting is carried out with a Treasury security as the fixed-income asset.	...yield on Treasury securities of comparable... Pg. 29, Ln. 8
63. The method of claim 58, wherein the step of converting is carried out with a tax-exempt security as the fixed-income asset.	...the property is a tax-exempt security. Pg. 24, Lns. 22-23
64. A method for making a financial analysis output having a system-determined purchase price for property in consummating a sale, the financial	The computer system uses as input data information obtained from a variety of sources, ...the property offering documents,... Pg. 15, Lns. 11-17, ...system-determined purchase

analysis output being made by steps including:

price... Pg. 15, Ln. 23

controlling a digital electrical computer processor to manipulate electrical signals in generating a market-based valuation for the property, the valuation reflecting at least one from a group consisting of expected return under a performance scenario, a price, and a quantitative description of risk, as part of a first financial analysis output;

...a digital electrical...decomposed from the property. Pg. 23, Lns. 29-31 to Pg. 24, Ln. 1

Thus market-based component valuation...Pg. 7, Ln. 12.

This information can include the expected returns under various performance scenarios...prices under various scenarios. Pg. 33, Lns. 14-16.

electronically communicating at least some of the first financial analysis output including the valuation as input to a second digital electrical computer having a programmed processor, the second digital electrical computer storing the input in memory accessible to the programmed processor corresponding to the second digital electrical computer;

This data can be communicated electronically... Pg. 56, Ln. 5

...a second digital electrical computer...provided to a component buyer. Pg. 56, Lns. 18-21

generating, with the second digital electrical computer and the input, the financial analysis output having the system-determined purchase price for the

More particularly, Computer System 248 can be characterized as providing a... signals into an illustration of data corresponding to the other modified electrical signals. Pg. 61, Ln. 21 – Pg.

property in consummating the sale.	62 Ln. 8
65. The method of claim 64, wherein the controlling is carried out with the expected return under a performance scenario as part of the first financial analysis output.	...expected returns under the various performance scenarios...Pg. 33, Ln. 19
66. The method of claim 64, wherein the controlling is carried out with the price as part of the first financial analysis output.	..., the price,... Pg. 33, Ln. 15
67. The method of claim 64, wherein the controlling is carried out with the quantitative description of risk as part of the first financial analysis output.	...various quantitative descriptions of risk... Pg. 33, Ln. 16.
68. The method of claim 64, wherein the controlling includes generating the valuation for at least one security for corporate debt as the property.	...valuation of the... in the marketplace... Pg. 12, Lns. 11-12, ORIGINAL SECURITY DEBT SERVICE: Pg. 67, Ln. 5, Ownership of Leased Property... for corporate debt... Pg. 4, Lns. 27-28.
69. The method of claim 65,	...valuation of the... in the marketplace... Pg.

wherein the controlling includes generating the valuation for at least one security for corporate debt as the property.	12, Lns. 11-12, ORIGINAL SECURITY DEBT SERVICE: Pg. 67, Ln. 5, Ownership of Leased Property... for corporate debt... Pg. 4, Lns. 27-28.
70. The method of claim 66, wherein the controlling includes generating the valuation for at least one security for corporate debt as the property.	...valuation of the... in the marketplace... Pg. 12, Lns. 11-12, ORIGINAL SECURITY DEBT SERVICE: Pg. 67, Ln. 5, Ownership of Leased Property... for corporate debt... Pg. 4, Lns. 27-28.
71. The method of claim 67, wherein the controlling includes generating the valuation for at least one security for corporate debt as the property.	...valuation of the... in the marketplace... Pg. 12, Lns. 11-12, ORIGINAL SECURITY DEBT SERVICE: Pg. 67, Ln. 5, Ownership of Leased Property... for corporate debt... Pg. 4, Lns. 27-28.
72. The method of claim 64, wherein the controlling includes generating the valuation for corporate debt as the property.	Ownership of leased property is a fixed-income asset...the market for corporate debt...Pg. 4, Lns. 27-28.
73. The method of claim 65, wherein the controlling includes generating the valuation for corporate debt as the property.	...valuation of the... in the marketplace... Pg. 12, Lns. 11-12, ORIGINAL SECURITY DEBT SERVICE: Pg. 67, Ln. 5, Ownership of Leased Property... for corporate debt... Pg. 4, Lns. 27-28.

74. The method of claim 66, wherein the controlling includes generating the valuation for corporate debt as the property.	Ownership of leased property is a fixed-income asset...the market for corporate debt...Pg. 4, Lns. 27-28.
75. The method of claim 67, wherein the controlling includes generating the valuation for corporate debt as the property.	Ownership of leased property is a fixed-income asset...the market for corporate debt...Pg. 4, Lns. 27-28.
76. A method for making a financial analysis output having a system-determined purchase price for tangible personal property in consummating a sale, the financial analysis output being made by steps including:	The computer system uses as input data information obtained from a variety of sources, ...the property offering documents,... Pg. 15, Lns. 11-17, ...system-determined purchase price... Pg. 15, Ln. 23
controlling a digital electrical computer processor to manipulate electrical signals in generating a market-based valuation for the tangible personal property, the valuation reflecting at least one from a group consisting of expected return under a performance scenario, a price, and a quantitative description of risk,	...a digital electrical...decomposed from the property. Pg. 23, Lns. 29-31 to Pg. 24, Ln. 1 Thus market-based component valuation...Pg. 7, Ln. 12. This information can include the expected returns under various performance scenarios...prices under various scenarios. Pg. 33, Lns. 14-16.

as part of a first financial analysis output;

electronically communicating at least some of the first financial analysis output including the valuation as input to a second digital electrical computer having a programmed processor, the second digital electrical computer storing the input in memory accessible to the programmed processor corresponding to the second digital electrical computer;

This data can be communicated electronically... Pg. 56, Ln. 5

...a second digital electrical computer...provided to a component buyer. Pg. 56, Lns. 18-21

generating, with the second digital electrical computer and the input, the financial analysis output having the system-determined purchase price for the tangible personal property in consummating the sale.

More particularly, Computer System 248 can be characterized as providing a... signals into an illustration of data corresponding to the other modified electrical signals. Pg. 61, Ln. 21 – Pg. 62 Ln. 8

77. The method of claim 76, wherein the controlling is carried out with the expected return under a performance scenario as part of the first financial analysis output.

...expected returns under the various performance scenarios...Pg. 33, Ln. 19

78. The method of claim 76,

..., the price,... Pg. 33, Ln. 15

wherein the controlling is carried out with the price as part of the first financial analysis output.

79. The method of claim 76, wherein the controlling is carried out with the quantitative description of risk as part of the first financial analysis output.

..., and various quantitative descriptions of risk,... Pg. 33, Lns. 15-16

80. The method of claim 64, wherein the controlling includes generating the valuation for real estate as the property.

...applied to the financial fields of securities, real estate, and taxation. Pg. 2, Lns. 6-7.

81. The method of claim 65, wherein the controlling includes generating the valuation for real estate as the property.

...applied to the financial fields of securities, real estate, and taxation. Pg. 2, Lns. 6-7.

82. The method of claim 66, wherein the controlling includes generating the valuation for real estate as the property.

...applied to the financial fields of securities, real estate, and taxation. Pg. 2, Lns. 6-7.

83. The method of claim 67, wherein the controlling includes generating the valuation for real estate as the property.	...applied to the financial fields of securities, real estate, and taxation. Pg. 2, Lns. 6-7.
84. The method of claim 64, wherein the controlling includes generating the valuation for the property not including any securities.	...applied to the financial fields of securities, real estate, and taxation. Pg. 2, Lns. 6-7.
85. The method of claim 65, wherein the controlling includes generating the valuation for the property not including any securities.	...applied to the financial fields of securities, real estate, and taxation. Pg. 2, Lns. 6-7.
86. The method of claim 66, wherein the controlling includes generating the valuation for the property not including any securities.	...applied to the financial fields of securities, real estate, and taxation. Pg. 2, Lns. 6-7.
87. The method of claim 67, wherein the controlling includes generating the valuation for the property not including any securities.	...applied to the financial fields of securities, real estate, and taxation. Pg. 2, Lns. 6-7.

88. The method of claim 64, wherein the controlling includes generating the valuation for a fixed-income asset as the property.	...every financial asset in the present embodiment... is treated as a fixed-income asset,... Pg. 46, Lns. 24-25.
89. The method of claim 65, wherein the controlling includes generating the valuation for a fixed-income asset as the property.	...every financial asset in the present embodiment... is treated as a fixed-income asset,... Pg. 46, Lns. 24-25.
90. The method of claim 66, wherein the controlling includes generating the valuation for a fixed-income asset as the property.	...every financial asset in the present embodiment... is treated as a fixed-income asset,... Pg. 46, Lns. 24-25.
91. The method of claim 67, wherein the controlling includes generating the valuation for a fixed-income asset as the property.	...every financial asset in the present embodiment... is treated as a fixed-income asset,... Pg. 46, Lns. 24-25.
92. The method of claim 64, wherein the controlling includes generating the valuation for a tax-exempt fixed-	Tax-Exempt Fixed-Income Security(ies). Pg. 46, Ln. 12. An additional feature... fixed-income portfolios arises... Pg. 54, Lns. 9-10.

income asset as the property.

93. The method of claim 65, wherein the controlling includes generating the valuation for a tax-exempt fixed-income asset as the property.	Tax-Exempt Fixed-Income Security(ies). Pg. 46, Ln. 12. An additional feature... fixed-income portfolios arises... Pg. 54, Lns. 9-10.
94. The method of claim 66, wherein the controlling includes generating the valuation for a tax-exempt fixed-income asset as the property.	Tax-Exempt Fixed-Income Security(ies). Pg. 46, Ln. 12. An additional feature... fixed-income portfolios arises... Pg. 54, Lns. 9-10.
95. The method of claim 67, wherein the controlling includes generating the valuation for a tax-exempt fixed-income asset as the property.	Tax-Exempt Fixed-Income Security(ies). Pg. 46, Ln. 12. An additional feature... fixed-income portfolios arises... Pg. 54, Lns. 9-10.
96. The method of claim 64, wherein the controlling is carried out with a second member of the group, and wherein the members of the group consist of the price and the quantitative description of risk.	..., the price,... Pg. 33, Ln. 15 ..., and various quantitative descriptions of risk,... Pg. 33, Lns. 15-16

97. The method of claim 96, wherein the controlling is carried out with the valuation further reflecting a risk-free rate.	To calculate the implied purchase price of the property...risk-free Treasury rate...Pg. 30, Lns. 10-14.
98. The method of claim 96, wherein the controlling includes generating the valuation for at least one security for corporate debt as the property.	...valuation of the... in the marketplace... Pg. 12, Lns. 11-12, ORIGINAL SECURITY DEBT SERVICE: Pg. 67, Ln. 5, Ownership of Leased Property... for corporate debt... Pg. 4, Lns. 27-28.
99. The method of claim 97, wherein the controlling includes generating the valuation for at least one security for corporate debt as the property.	...valuation of the... in the marketplace... Pg. 12, Lns. 11-12, ORIGINAL SECURITY DEBT SERVICE: Pg. 67, Ln. 5, Ownership of Leased Property... for corporate debt... Pg. 4, Lns. 27-28.
100. The method of claim 96, wherein the controlling includes generating the valuation for corporate debt as the property.	Ownership of leased property is a fixed-income asset...the market for corporate debt...Pg. 4, Lns. 27-28.
101. The method of claim 97, wherein the controlling includes generating the valuation for corporate debt as the property.	Ownership of leased property is a fixed-income asset...the market for corporate debt...Pg. 4, Lns. 27-28.

102. The method of claim 76, wherein the controlling is carried out with a second member of the group, and wherein the members of the group consist of the price and the quantitative description of risk.	..., the price,... Pg. 33, Ln. 15 ..., and various quantitative descriptions of risk,... Pg. 33, Lns. 15-16
103. The method of claim 102, wherein the controlling is carried out with the valuation further reflecting a risk-free rate.	To calculate the implied purchase price of the property...risk-free Treasury rate...Pg. 30, Lns. 10-14.
104. The method of claim 96, wherein the controlling includes generating the valuation for real estate as the property.	...applied to the financial fields of securities, real estate, and taxation. Pg. 2, Lns. 6-7.
105. The method of claim 97, wherein the controlling includes generating the valuation for real estate as the property.	Another object of the present invention...to real estate as the property. Pg. 14, Lns. 9-10.
106. The method of claim 96,	...applied to the financial fields of securities, real

wherein the controlling includes generating the valuation for the property not including any securities.	estate, and taxation. Pg. 2, Lns. 6-7.
107. The method of claim 97, wherein the controlling includes generating the valuation for the property not including any securities.	...applied to the financial fields of securities, real estate, and taxation. Pg. 2, Lns. 6-7.
108. The method of claim 96, wherein the controlling includes generating the valuation for a fixed-income asset as the property.	...applied to the financial fields of securities, real estate, and taxation. Pg. 2, Lns. 6-7.
109. The method of claim 97, wherein the controlling includes generating the valuation for a fixed-income asset as the property.	...applied to the financial fields of securities, real estate, and taxation. Pg. 2, Lns. 6-7.
110. The method of claim 96, wherein the controlling includes generating the valuation for a tax-exempt fixed-income asset as the property.	Tax-Exempt Fixed-Income Security(ies). Pg. 46, Ln. 12. An additional feature... fixed-income portfolios arises... Pg. 54, Lns. 9-10.

111. The method of claim 97, wherein the controlling includes generating the valuation for a tax-exempt fixed-income asset as the property.	Tax-Exempt Fixed-Income Security(ies). Pg. 46, Ln. 12. An additional feature... fixed-income portfolios arises... Pg. 54, Lns. 9-10.
112. The method of claim 64, wherein the controlling includes generating the valuation for at least one security as the property.	...applied to the financial fields of securities, real estate, and taxation. Pg. 2, Lns. 6-7.
113. The method of claim 65, wherein the controlling includes generating the valuation for at least one security as the property.	...applied to the financial fields of securities, real estate, and taxation. Pg. 2, Lns. 6-7.
114. The method of claim 66, wherein the controlling includes generating the valuation for at least one security as the property.	...applied to the financial fields of securities, real estate, and taxation. Pg. 2, Lns. 6-7.
115. The method of claim 67, wherein the controlling includes generating the valuation for at least one security as the property.	...applied to the financial fields of securities, real estate, and taxation. Pg. 2, Lns. 6-7.

116. The method of claim 96, wherein the controlling includes generating the valuation for at least one security as the property.	...applied to the financial fields of securities, real estate, and taxation. Pg. 2, Lns. 6-7.
117. The method of claim 97, wherein the controlling includes generating the valuation for at least one security as the property.	...applied to the financial fields of securities, real estate, and taxation. Pg. 2, Lns. 6-7.
118. The method of claim 64, wherein the controlling is carried out with the property as a component of temporally decomposed property.	...in the form of depreciation of the temporally decomposed property... Pg. 19, Lns. 8-9
119. The method of claim 118, wherein the controlling is carried out with the component as a remainder interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.
120. The method of claim 118, wherein the controlling is carried out with the component as an equity interest in a remainder interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.

121. The method of claim 118, wherein the controlling is carried out with the component as an estate for years interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.
122. The method of claim 118, wherein the controlling is carried out with the component as a term of years interest.	For example, the estate for years can be a term of years interest. Pg. 17, Lns. 31-32.
123. The method of claim 64, wherein the controlling is carried out with the property as a fractional interest in a component of temporally decomposed property.	...in the form of depreciation of the temporally decomposed property... Pg. 19, Lns. 8-9 ...purchase of a fractional economic interest in the component. Pg. 9, Lns. 25-26.
124. The method of claim 123, wherein the controlling is carried out with the component as a remainder interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.
125. The method of claim 123, wherein the controlling is carried out with the component as an equity interest in a remainder interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.

126. The method of claim 123, wherein the controlling is carried out with the component as an estate for years interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.
127. The method of claim 123, wherein the controlling is carried out with the component as a term of years interest.	For example, the estate for years can be a term of years interest. Pg. 17, Lns. 31-32.
128. The method of claim 65, wherein the controlling is carried out with the property as a component of temporally decomposed property.	...in the form of depreciation of the temporally decomposed property... Pg. 19, Lns. 8-9
129. The method of claim 128, wherein the controlling is carried out with the component as a remainder interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.
130. The method of claim 128, wherein the controlling is carried out with the component as an equity interest in a remainder interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.

131. The method of claim 128, wherein the controlling is carried out with the component as an estate for years interest.

Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.

132. The method of claim 128, wherein the controlling is carried out with the component as a term of years interest.

For example, the estate for years can be a term of years interest. Pg. 17, Lns. 31-32.

133. The method of claim 65, wherein the controlling is carried out with the property as a fractional interest in a component of temporally decomposed property.

...in the form of depreciation of the temporally decomposed property... Pg. 19, Lns. 8-9 ...purchase of a fractional economic interest in the component. Pg. 9, Lns. 25-26.

134. The method of claim 133, wherein the controlling is carried out with the component as a remainder interest.

Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.

135. The method of claim 133, wherein the controlling is carried out with the component as an equity interest in a remainder interest.

Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.

136. The method of claim 133, wherein the controlling is carried out with the component as an estate for years interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.
137. The method of claim 133, wherein the controlling is carried out with the component as a term of years interest.	For example, the estate for years can be a term of years interest. Pg. 17, Lns. 31-32.
138. The method of claim 66, wherein the controlling is carried out with the property as a component of temporally decomposed property.	...in the form of depreciation of the temporally decomposed property... Pg. 19, Lns. 8-9
139. The method of claim 138, wherein the controlling is carried out with the component as a remainder interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.
140. The method of claim 138, wherein the controlling is carried out with the component as an equity interest in a remainder interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.
141. The method of claim 138,	Elements of the Financial Analysis Output...

wherein the controlling is carried out with the component as an estate for years interest.	price for the remainder interest component... Pg. 30, Lns. 16-18.
142. The method of claim 138, wherein the controlling is carried out with the component as a term of years interest.	For example, the estate for years can be a term of years interest. Pg. 17, Lns. 31-32.
143. The method of claim 66, wherein the controlling is carried out with the property as a fractional interest in a component of temporally decomposed property.	...in the form of depreciation of the temporally decomposed property... Pg. 19, Lns. 8-9 ...purchase of a fractional economic interest in the component. Pg. 9, Lns. 25-26.
144. The method of claim 143, wherein the controlling is carried out with the component as a remainder interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.
145. The method of claim 143, wherein the controlling is carried out with the component as an equity interest in a remainder interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.
146. The method of claim 143,	Elements of the Financial Analysis Output...

wherein the controlling is carried out with the component as an estate for years interest.	price for the remainder interest component... Pg. 30, Lns. 16-18.
147. The method of claim 143, wherein the controlling is carried out with the component as a term of years interest.	For example, the estate for years can be a term of years interest. Pg. 17, Lns. 31-32.
148. The method of claim 67, wherein the controlling is carried out with the property as a component of temporally decomposed property.	...in the form of depreciation of the temporally decomposed property... Pg. 19, Lns. 8-9
149. The method of claim 148, wherein the controlling is carried out with the component as a remainder interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.
150. The method of claim 148, wherein the controlling is carried out with the component as an equity interest in a remainder interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.
151. The method of claim 148, wherein the controlling is carried out with	Elements of the Financial Analysis Output... price for the remainder interest component...

the component as an estate for years interest.	Pg. 30, Lns. 16-18.
152. The method of claim 148, wherein the controlling is carried out with the component as a term of years interest.	For example, the estate for years can be a term of years interest. Pg. 17, Lns. 31-32.
153. The method of claim 67, wherein the controlling is carried out with the property as a fractional interest in a component of temporally decomposed property.	...in the form of depreciation of the temporally decomposed property... Pg. 19, Lns. 8-9 ...purchase of a fractional economic interest in the component. Pg. 9, Lns. 25-26.
154. The method of claim 153, wherein the controlling is carried out with the component as a remainder interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.
155. The method of claim 153, wherein the controlling is carried out with the component as an equity interest in a remainder interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.
156. The method of claim 153, wherein the controlling is carried out with	Elements of the Financial Analysis Output... price for the remainder interest component...

the component as an estate for years interest.	Pg. 30, Lns. 16-18.
157. The method of claim 153, wherein the controlling is carried out with the component as a term of years interest.	For example, the estate for years can be a term of years interest. Pg. 17, Lns. 31-32.
158. The method of claim 96, wherein the controlling is carried out with the property as a component of temporally decomposed property.	...in the form of depreciation of the temporally decomposed property... Pg. 19, Lns. 8-9
159. The method of claim 158, wherein the controlling is carried out with the component as a remainder interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.
160. The method of claim 158, wherein the controlling is carried out with the component as an equity interest in a remainder interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.
161. The method of claim 158, wherein the controlling is carried out with the component as an estate for years	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.

interest.

162. The method of claim 158, wherein the controlling is carried out with the component as a term of years interest.	For example, the estate for years can be a term of years interest. Pg. 17, Lns. 31-32.
163. The method of claim 96, wherein the controlling is carried out with the property as a fractional interest in a component of temporally decomposed property.	...in the form of depreciation of the temporally decomposed property... Pg. 19, Lns. 8-9 ...purchase of a fractional economic interest in the component. Pg. 9, Lns. 25-26.
164. The method of claim 163, wherein the controlling is carried out with the component as a remainder interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.
165. The method of claim 163, wherein the controlling is carried out with the component as an equity interest in a remainder interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.
166. The method of claim 163, wherein the controlling is carried out with the component as an estate for years	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.

interest.

167. The method of claim 163, wherein the controlling is carried out with the component as a term of years interest.	For example, the estate for years can be a term of years interest. Pg. 17, Lns. 31-32.
168. The method of claim 97, wherein the controlling is carried out with the property as a component of temporally decomposed property.	...in the form of depreciation of the temporally decomposed property... Pg. 19, Lns. 8-9
169. The method of claim 168, wherein the controlling is carried out with the component as a remainder interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.
170. The method of claim 168, wherein the controlling is carried out with the component as an equity interest in a remainder interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.
171. The method of claim 168, wherein the controlling is carried out with the component as an estate for years interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.

172. The method of claim 168, wherein the controlling is carried out with the component as a term of years interest.	For example, the estate for years can be a term of years interest. Pg. 17, Lns. 31-32.
173. The method of claim 97, wherein the controlling is carried out with the property as a fractional interest in a component of temporally decomposed property.	...in the form of depreciation of the temporally decomposed property... Pg. 19, Lns. 8-9 ...purchase of a fractional economic interest in the component. Pg. 9, Lns. 25-26.
174. The method of claim 173, wherein the controlling is carried out with the component as a remainder interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.
175. The method of claim 173, wherein the controlling is carried out with the component as an equity interest in a remainder interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.
176. The method of claim 173, wherein the controlling is carried out with the component as an estate for years interest.	Elements of the Financial Analysis Output... price for the remainder interest component... Pg. 30, Lns. 16-18.

177. The method of claim 173, wherein the controlling is carried out with the component as a term of years interest.	For example, the estate for years can be a term of years interest. Pg. 17, Lns. 31-32.
178. The method of any one of claims 64 to 117, wherein the consummating the sale includes consummating the sale through a financial exchange.	... that the sale and purchase of each component...financial exchange established to provide liquidity in a market in which none presently exists. Pg. 27, Lns. 9-11
179. The method of any one of claims 64 to 117, wherein the property is carried out with the component as a component of an other property.	... a financial innovation involving the securitization of property by its decomposition into at least two components. Pg. 49, Lns. 8-9.
180. The method of claim 179 wherein the consummating the sale includes consummating the sale through a financial exchange.	... that the sale and purchase of each component...financial exchange established to provide liquidity in a market in which none presently exists. Pg. 27, Lns. 9-11
226. A method for making financial analysis output having a system-determined purchase price for property in	The computer system uses as input data information obtained from a variety of sources, ...the property offering documents,... Pg. 15,

consummating a sale, the financial analysis output being made by steps including:

Lns. 11-17, ...system-determined purchase price... Pg. 15, Ln. 23

controlling a digital electrical computer processor to manipulate electrical signals in generating a valuation for the property, the valuation reflecting at least one from a group consisting of expected return under a performance scenario, a price, and a quantitative description of risk, as part of a first financial analysis output;

...a digital electrical...decomposed from the property. Pg. 23, Lns. 29-31 to Pg. 24, Ln. 1

Sellers will learn to value each component separately in arriving at property valuation. Pg. 23, Lns. 12-13.

..expected returns under various performance scenarios, the price, and various quantitative descriptions of risk, e.g., prices under various scenarios. Pg. 33, Lns. 14-16.

electronically communicating at least some of the first financial analysis output including the valuation as input to a second digital electrical computer having a programmed processor, the second digital electrical computer storing the input in memory accessible to the programmed processor corresponding to the second digital electrical computer;

This data can be communicated electronically... Pg. 56, Ln. 5

...a second digital electrical computer...provided to a component buyer. Pg. 56, Lns. 18-21

generating, with the second digital electrical computer and the input, the financial analysis output having a system-

More particularly, Computer System 248 can be characterized as providing a... signals into an illustration of data corresponding to the other

determined purchase price for the property in consummating the sale.	modified electrical signals. Pg. 61, Ln. 21 – Pg. 62 Ln. 8
227. The method of claim 226, wherein the controlling is carried out with the expected return under a performance scenario as part of the first financial analysis output.	...expected returns under the various performance scenarios...Pg. 33, Ln. 19
228. The method of claim 226, wherein the controlling is carried out with the price as part of the first financial analysis output.	...computations of the prices under the various performance scenarios...scenarios electronically within the group. Pg. 33, Lns. 22-25.
229. The method of claim 226, wherein the controlling is carried out with the quantitative description of risk as part of the first financial analysis output.	...various quantitative descriptions of risk... Pg. 33, Ln. 16.
230. The method of claim 226, wherein the controlling includes generating the valuation for at least one security for corporate debt as the property.	...valuation of the... in the marketplace... Pg. 12, Lns. 11-12, ORIGINAL SECURITY DEBT SERVICE: Pg. 67, Ln. 5, Ownership of Leased Property... for corporate debt... Pg. 4, Lns. 27-28.

231. The method of claim 227, wherein the controlling includes generating the valuation for at least one security for corporate debt as the property.	...valuation of the... in the marketplace... Pg. 12, Lns. 11-12, ORIGINAL SECURITY DEBT SERVICE: Pg. 67, Ln. 5, Ownership of Leased Property... for corporate debt... Pg. 4, Lns. 27-28.
232. The method of claim 228, wherein the controlling includes generating the valuation for at least one security for corporate debt as the property.	...valuation of the... in the marketplace... Pg. 12, Lns. 11-12, ORIGINAL SECURITY DEBT SERVICE: Pg. 67, Ln. 5, Ownership of Leased Property... for corporate debt... Pg. 4, Lns. 27-28.
233. The method of claim 229, wherein the controlling includes generating the valuation for at least one security for corporate debt as the property.	...valuation of the... in the marketplace... Pg. 12, Lns. 11-12, ORIGINAL SECURITY DEBT SERVICE: Pg. 67, Ln. 5, Ownership of Leased Property... for corporate debt... Pg. 4, Lns. 27-28.
234. The method of claim 226, wherein the controlling includes generating the valuation for corporate debt as the property.	Ownership of leased property is a fixed-income asset...the market for corporate debt...Pg. 4, Lns. 27-28.
235. The method of claim 227, wherein the controlling includes generating the valuation for corporate debt as the property.	Ownership of leased property is a fixed-income asset...the market for corporate debt...Pg. 4, Lns. 27-28.

236. The method of claim 228, wherein the controlling includes generating the valuation for corporate debt as the property.	Ownership of leased property is a fixed-income asset...the market for corporate debt...Pg. 4, Lns. 27-28.
237. The method of claim 229, wherein the controlling includes generating the valuation for corporate debt as the property.	Ownership of leased property is a fixed-income asset...the market for corporate debt...Pg. 4, Lns. 27-28.
238. The method of claim 226, wherein the controlling includes generating the valuation for tangible personal property as the property.	In the case of tangible personal property, the purchase price... Pg. 11, Lns. 7-8.
239. The method of claim 227, wherein the controlling includes generating the valuation for tangible personal property as the property.	In the case of tangible personal property, the purchase price... Pg. 11, Lns. 7-8.
240. The method of claim 228, wherein the controlling includes generating the valuation for tangible personal property	In the case of tangible personal property, the purchase price... Pg. 11, Lns. 7-8.

as the property.

241. The method of claim 229, wherein the controlling includes generating the valuation for tangible personal property as the property.

In the case of tangible personal property, the purchase price... Pg. 11, Lns. 7-8.

242. The method of claim 226, wherein the controlling includes generating the valuation for real estate as the property.

Another object of the present invention is to provide the same applied to real estate as the property. Pg. 14, Lns. 9-10.

243. The method of claim 227, wherein the controlling includes generating the valuation for real estate as the property.

Another object of the present invention is to provide the same applied to real estate as the property. Pg. 14, Lns. 9-10.

244. The method of claim 228, wherein the controlling includes generating the valuation for real estate as the property.

Another object of the present invention is to provide the same applied to real estate as the property. Pg. 14, Lns. 9-10.

245. The method of claim 229, wherein the controlling includes generating

Another object of the present invention is to provide the same applied to real estate as the

the valuation for real estate as the property.	property. Pg. 14, Lns. 9-10.
246. The method of claim 226, wherein the controlling includes generating the valuation for the property not including any securities.	...applied to the financial fields of securities, real estate, and taxation. Pg. 2, Lns. 6-7.
247. The method of claim 227, wherein the controlling includes generating the valuation for the property not including any securities.	...applied to the financial fields of securities, real estate, and taxation. Pg. 2, Lns. 6-7.
248. The method of claim 228, wherein the controlling includes generating the valuation for the property not including any securities.	...applied to the financial fields of securities, real estate, and taxation. Pg. 2, Lns. 6-7.
249. The method of claim 229, wherein the controlling includes generating the valuation for the property not including any securities.	...applied to the financial fields of securities, real estate, and taxation. Pg. 2, Lns. 6-7.
250. The method of claim 226,	...every financial asset in the present

wherein the controlling includes generating the valuation for a fixed-income asset as the property.	embodiment... is treated as a fixed-income asset,... Pg. 46, Lns. 24-25.
251. The method of claim 227, wherein the controlling includes generating the valuation for a fixed-income asset as the property.	...every financial asset in the present embodiment... is treated as a fixed-income asset,... Pg. 46, Lns. 24-25.
252. The method of claim 228, wherein the controlling includes generating the valuation for a fixed-income asset as the property.	...every financial asset in the present embodiment... is treated as a fixed-income asset,... Pg. 46, Lns. 24-25.
253. The method of claim 229, wherein the controlling includes generating the valuation for a fixed-income asset as the property.	Ownership of leased property is a fixed-income asset with investment characteristics...Pg. 4, Ln. 26.
254. The method of claim 226, wherein the controlling includes generating the valuation for a tax-exempt fixed-income asset as the property.	Tax-Exempt Fixed-Income Security(ies). Pg. 46, Ln. 12. An additional feature... fixed-income portfolios arises... Pg. 54, Lns. 9-10.

255. The method of claim 227, wherein the controlling includes generating the valuation for a tax-exempt fixed-income asset as the property.	Tax-Exempt Fixed-Income Security(ies). Pg. 46, Ln. 12. An additional feature... fixed-income portfolios arises... Pg. 54, Lns. 9-10.
256. The method of claim 228, wherein the controlling includes generating the valuation for a tax-exempt fixed-income asset as the property.	Tax-Exempt Fixed-Income Security(ies). Pg. 46, Ln. 12. An additional feature... fixed-income portfolios arises... Pg. 54, Lns. 9-10.
257. The method of claim 229, wherein the controlling includes generating the valuation for a tax-exempt fixed-income asset as the property.	Tax-Exempt Fixed-Income Security(ies). Pg. 46, Ln. 12. An additional feature... fixed-income portfolios arises... Pg. 54, Lns. 9-10.

VII. Concise Statement of All Issues Presented for Review

The issue presented for review is whether; pursuant to 35 U.S.C. §103, the rejection of all claims is improper for any and all of the following reasons:

A. Is Ginsberg and Official Notice and art relied thereon insufficient for *prima facie* obviousness because:

1. As to claims 1, 3-14, 29, 31-42, 64, 66, 226, 228:

a. Is the claimed invention different from Ginsberg for any and all of the following reasons;

(1) Ginsberg's index does not teach or suggest the claimed property:

(2) Ginsberg does not teach or suggest the claimed second

digital computer and hardware used in the claimed method steps;

(3) Ginsberg does not teach the claimed input (i.e., at least some of the financial analysis output as the input)?

1A. Further as to a sub-group of the Group 1 claims 1, 3-14, 29, 31-42, 64, (i.e., not including claims 66, 226, 228), does Ginsberg fail to teach Applicant's claimed methodology which requires that the second market-based financial analysis reflects the claimed computation of a current market-based yield/discount rate for the property being valued, and

a. Is other art not properly applied because:

(1) The Final Rejection is premised on an improper legal standard: Official Notice of each difference individually is an improper legal standard under Sec. 103 for evaluating the invention as a whole;

(2) There is no proper reason to modify Ginsberg because:

i) Official Notice based on non-analogous art cannot provide a proper motivation to modify other art;

ii) Art / notice cannot be combined in the absence of any reason to combine / modify;

iii) There is no showing of a motivation for a non-obvious product of a material limitation;

iv) The theory of obviousness is not enabled by the cited art;

v) The proposed modification would destroy Ginsberg's intent, purpose, and function;

vi) The proposed modification is insufficient to explain all claim requirements;

b. Even if all the art and Official Notice and supporting art is applied, however, and for whatever reason and even for no reason whatsoever, does the art fall short of Applicant's claimed invention as there is no disclosure of many claim elements?

2. Further as to claims 1, 8, and 14:

a. Is Ginsberg's Treasury security not tax-exempt;

b. Does Ginsberg fail to enable municipal bonds as the tax-exempt?

3. Further as to claims 4, 6, 10, 12, 32, 34, and 40:

a. Incorporate by reference A1, and is Ginsberg and other art not enabling for corporate debt?

4. Further as to claims 64, 66, and 226, 228:

a. Incorporate by reference A1, and is there no financial analysis output having the system-determined purchase price for the property consummating the sale either?

B. Incorporation by reference: A1, and further, are Ginsberg, Lupien, Official Notice, and art relied thereon insufficient for *prima facie* obviousness because:

1. As to claims 57-63:

a. No cited art even mentions the claimed offering document or any means or method whatsoever for generating the financial analysis output including the offering document;

b. No cited art teaches or suggests the claimed controlling a computer... to compute a system-determined purchase price for the property in consummating a sale;

c. Incorporate by reference: 1A, further there is no proper reason to modify or combine?

2. Further as to claims 59 and 61:

a. Incorporate by reference B1, and is Ginsberg not enabling for corporate debt?

3. Further as to claim 63:

a. Is Ginsberg's Treasury security not tax-exempt;

b. Does Ginsberg fail to enable municipal bonds as the tax-exempt?

C. Incorporation by reference: A1, and further, are Ginsberg, Coughlan, Official Notice, and art relied thereon insufficient for *prima facie* obviousness because:

1. As to claims 43, 45-56, 67, 96-101, 104-111, 116-117, 158, 229:

a. There is no teaching of the claimed valuation reflecting... a quantitative description of risk;

b. No reason is provided to combine?

2. As to claims 96-101, 104-111, 116-117, is there no teaching of a second member of the group;

a. No reason is provided to combine?

3. As to claims 97, 99, 101, 105, 107, 109, 111, 117:

a. Is there no teaching of the claims risk-free rate?

4. As to claims 98-101:

a. Same reasons as C1, and is there no enabling disclosure of corporate debt?

5. As to claims 104-105:

a. Same reasons as C1, and is real estate not enabled in Ginsberg?

6. As to claims 106-107:

a. Same reasons as C1, and is there no disclosure of not including securities?

7. As to claims 110-111:

a. Same reasons as C1, and are Treasuries not tax-exempt?

D. Incorporation by reference: A1, and further, are Ginsberg, Epstein, Official Notice, and art relied thereon insufficient for *prima facie* obviousness because:

1. As to claims 15, 17-28, 65, 227:

a. Rejection is premised on a misconstrued claim;

b. There is no teaching of a performance scenario;

c. No reason is provided to combine?

2. As to claims 17 and 23:

a. Incorporate by reference A1, and is Ginsberg not enabling for corporate debt?

3. As to claim 65:

a. Incorporate by reference D1, and further is there no disclosure of

system-determined purchase price of the property?

E. Incorporate by reference: A1, and further, are Ginsberg, Graff, Official Notice, and art relied thereon insufficient for *prima facie* obviousness because:

1. As to claims 2, 30, 118-177:

a. There is no reason to combine or modify because:

(1) There is No Plausible Reason to Combine;

(2) Examiner's Reason to Combine is Insufficient;

(3) Examiner's Proposed Modifications Are Inoperable and Not Enabled—Something Undoable is Not Obvious;

(4) The Examiner Concedes that the Ginsberg Methodology is Inapplicable to Graff or the claims;

(5) Incorporation by reference: 1A?

b. Were all claim limitations not considered (many claim elements are not disclosed in the combination); or because:

(1) No cited art teaches generating a second...valuation for the property...with the second...computer;

(2) No cited art teaches a market-based valuation...as part of the financial analysis output... as input to the second...computer such that one could do the step of generating the second market-based valuation for the property using... the input;

(3) No cited art teaches a generating a second financial analysis output, including the second...valuation?

c. Is there improper Official Notice / Insufficient Reason to Combine or Modify?

2. As to claims 118-127 and 138-147, is the rejection improper because:

a. There is no teaching of a component of temporally decomposed property;

b. There is no teaching of the claimed system-determined purchase price for a component of temporally decomposed property;

c. No reason is provided to combine;

d. As to claims 119, 124, 139, and 144, there also is no teaching of the claimed remainder interest;

e. As to claims 120, 125, 140, and 145, there also is no teaching of the claimed equity interest in a remainder interest;

f. As to claims 121, 126, 141, and 146, there also is no teaching of the claimed estate for years interest;

g. As to claim 122, 127, 142, and 147, there also is no teaching of the claimed term of years interest?

3. As to claims 123-127 and 143-147:

a. Is there no teaching of the claimed fractional interest?

F. Incorporation by reference: D1, E1, and F1, and further, are Ginsberg, Graff, Epstein, Official Notice, and art relied thereon insufficient for *prima facie* obviousness because:

1. As to claims 128-137:

a. No reason whatsoever is provided to combine or modify?

2. As to claims 16, 128-137:

a. No reason is provided to combine or modify;

b. There is a failure to consider the claim as a whole;

c. As to claim 16, incorporate by reference E1 and further, there is no disclosure of the claimed *market-based valuation reflecting* an expected return under a performance scenario;

d. Incorporate by reference F1a, and further as to claim 128, there is no teaching of the claimed component;

i. As to claim 129, there also is no teaching of the claimed remainder interest;

ii. As to claim 130, there also is no teaching of the claimed equity interest;

iii. As to claim 131, here also is no teaching of the claimed estate for years interest;

iv. As to claim 132, there also is no teaching of the

claimed term of years interest?

e. Incorporate by reverence F1b, and further as to claim 133, is there no teaching of the claimed fractional interest;

i. As to claim 134, is there also no teaching of the claimed remainder interest;

ii. As to claim 135, is there also no teaching of the claimed equity interest;

iii. As to claim 136, is there also no teaching of the claimed estate for years interest;

iv. As to claim 137, is there also is no teaching of the claimed term of years interest?

G. Incorporation by reference: C1, D1 and E1, and further, are Ginsberg, Coughlan, Epstein, Official Notice, and art relied thereon insufficient for *prima facie* obviousness because:

1. As to claims 68-75, 80-95, 112-115, and 230-257:

a. No reason is provided to combine or modify;

b. As to claims 68-71 and 230-233 there is no enabling disclosure for at least one security for corporate debt;

c. As to claims 72-75 and 234-237 there is no enabling disclosure for corporate debt;

d. As to claims 80-83 and 242-245 there is no enabling disclosure for real estate;

e. As to claims 84-87 and 246-250, the Examiner concedes that there is no teaching for property not including any securities;

f. As to claims 92-95 and 255-257, there is no teaching of tax-exempt;

(1) Ginsberg's Treasury security is not tax-exempt;

(2) Ginsberg does not enable municipal bonds as the tax-exempt?

H. Incorporation by reference: A1, C1, and E1, and further, are Ginsberg, Graff, Coughlan, Official Notice, and art relied thereon insufficient for *prima facie* obviousness because:

1. As to claims 44, 148, 152-177:

   a. No reason is provided to combine or modify;

      (1) There is No Plausible Reason to Combine;

   b. No teaching of quantitative description of risk;

      (1) No teaching thereof;

   c. As to claim 44, Incorporate by reference A1 and E1?

2. As to claims 148-152, is there no teaching of temporally decompose;

   a. As to claims 149-152:

      (1) As to claim 149 there also is no teaching of the claimed remainder interest;

      (2) As to claim 150 there also is no teaching of the claimed equity interest in a remainder interest;

      (3) As to claim 151 there also is no teaching of the claimed estate for years interest;

      (4) As to claim 152 there also is no teaching of the claimed term of years interest?

3. As to claims 153-157, are the Examiner's contentions regarding fractional not understandable so as to therefore be traversed and reversable?

   a. As to claims 154-157:

      (1) As to claim 154 there also is no teaching of the claimed remainder interest;

      (2) As to claim 155 there also is no teaching of the claimed equity interest in a remainder interest;

      (3) As to claim 156 there also is no teaching of the claimed estate for years interest;

      (4) As to claim 157 there also is no teaching of the claimed term of years interest;

4. As to claims 158-162, there is no teaching of a second member of the group;

   a. No reason is provided to combine?

5. As to claims 159-162:

   a. As to claim 159 there also is no teaching of the claimed remainder interest;

   b. As to claim 160 there also is no teaching of the claimed equity interest in a remainder interest;

   c. As to claim 161 there also is no teaching of the claimed estate for years interest;

   d. As to claim 162 there also is no teaching of the claimed term of years interest?

6. As to claims 163-167, are the Examiner's contentions regarding fractional not understandable so as to therefore be traversed and reversable?

   a. As to claim 164 there also is no teaching of the claimed remainder interest;

   b. As to claim 165 there also is no teaching of the claimed equity interest in a remainder interest;

   c. As to claim 166, there also is no teaching of the claimed estate for years interest;

   d. As to claim 167 there also is no teaching of the claimed term of years interest?

7. As to claims 168-172, is there no teaching of risk-free:

   a. As to claim 169 there also is no teaching of the claimed remainder interest;

   b. As to claim 170 there also is no teaching of the claimed equity interest in a remainder interest;

   c. As to claim 171 there also is no teaching of the claimed estate for years interest;

   d. As to claim 172 there also is no teaching of the claimed term of years interest?

8. As to claims 173-177, are the Examiner's contentions regarding fractional not understandable so as to therefore be traversed and reversable?

   a. As to claims 174-177:

(1) As to claim 174 there also is no teaching of the claimed remainder interest;

(2) As to claim 175 there also is no teaching of the claimed equity interest in a remainder interest;

(3) As to claim 176 there also is no teaching of the claimed estate for years interest;

(4) As to claim 177 there also is no teaching of the claimed term of years interest?

I. Incorporation by reference: A1, C, D, and E, and further,are Ginsberg, Graff, Coughlan, Epstein, Official Notice, and art relied thereon insufficient for *prima facie* obviousness because:

1 As to claims 178-180, there is no reason to combine;

a. There is No Plausible Reason to Combine;

(1). As to claim 179, further, there is no teaching of a component of another property?

J. Is there no apparent ground of rejection for claims 238-241, such that the rejection is a PTO mistake?

K. Are there other issues?

VIII. Grouping of Claims for Each Ground of Rejection Which Appellant Contests

Pursuant to 35 U.S.C. §103, the rejection of all claims is improper: *prima facie* obviousness has not been shown because the claimed invention is different from the cited art for any and all of the following reasons.

A. Ginsberg and Official Notice and art relied thereon are insufficient for *prima facie* obviousness because:

1. As to claims 1, 3-14, 29, 31-42, 64, 66, 226, 228:

a. The claimed invention is different from Ginsberg for any and all of the following reasons:

(1) Ginsberg's index does not teach or suggest the claimed property.

(2) Ginsberg does not teach or suggest the claimed second digital computer and hardware used in the claimed method steps.

(3) Ginsberg does not teach the claimed input (i.e., at least some of the financial analysis output as the input).

1A. Further as to a sub-group of the Group 1 claims 1, 3-14, 29, 31-42, 64, (i.e., not including claims 66, 226, 228), Ginsberg does not teach Applicant's claimed methodology which requires that the second market-based financial analysis reflects the claimed computation of a current market-based yield/discount rate for the property being valued.

a. Other art is not properly applied because:

(1) The Final Rejection is premised on an improper legal standard: Official Notice of each difference individually is an improper legal standard under Sec. 103 for evaluating the invention as a whole.

(2) There is no proper reason to modify Ginsberg because:

i) Official Notice based on non-analogous art cannot provide a proper motivation to modify other art.

ii) Art / notice cannot be combined in the absence of any reason to combine / modify.

iii) There is no showing of a motivation for a non-obvious product of a material limitation.

iv) The theory of obviousness is not enabled by the cited art.

v) The proposed modification would destroy Ginsberg's intent, purpose, and function.

vi) The proposed modification is insufficient to explain all claim requirements.

b. Even if all the art and Official Notice and supporting art is applied, however, and for whatever reason and even for no reason whatsoever, the art falls short of Applicant's claimed invention as there is no disclosure of many claim elements.

2. Further as to claims 1, 8, and 14:

a. Ginsberg's Treasury security is not tax-exempt.

b. Ginsberg does not enable municipal bonds as the tax-exempt.

c. Summary.

3. Further as to claims 4, 6, 10, 12, 32, 34, and 40:

a. Incorporate by reference A1, and Ginsberg and other art is not enabling for corporate debt.

4. Further as to claims 64, 66, and 226, 228:

a. Incorporate by reference A1, and there is no financial analysis output having the system-determined purchase price for the property consummating the sale either.

B. Incorporation by reference: A1, and further, Ginsberg, Lupien, Official Notice, and art relied thereon are insufficient for *prima facie* obviousness because:

1. As to claims 57-63:

a. No cited art even mentions the claimed offering document or any means or method whatsoever for generating the financial analysis output including the offering document.

b. No cited art teaches or suggests the claimed controlling a computer... to compute a system-determined purchase price for the property in consummating a sale.

c. Incorporate by reference: 1A, further there is no proper reason to modify or combine.

2. Further as to claims 59 and 61:

a. Incorporate by reference B1, and Ginsberg is not enabling for corporate debt.

3. Further as to claim 63:

a. Ginsberg's Treasury security is not tax-exempt.

b. Ginsberg does not enable municipal bonds as the tax-exempt.

c. Summary.

C. Incorporation by reference: A1, and further, Ginsberg, Coughlan, Official Notice, and art relied thereon are insufficient for *prima facie* obviousness because:

1. As to claims 43, 45-56, 67, 96-101, 104-111, 116-117, 158, 229

   a. There is no teaching of the claimed valuation reflecting... a quantitative description of risk.

   b. No reason to combine.

2. As to claims 96-101, 104-111, 116-117, there is no teaching of a second member of the group.

   a. No reason to combine.

3. As to claims 97, 99, 101, 105, 107, 109, 111, 117

   a. No teaching of the claims risk-free rate.

4. As to claims 98-101

   a. Same reasons as C1, and not enabling to corporate debt.

5. As to claims 104-105

   a. Same reasons as C1, and real estate is not enabled in Ginsberg.

6. As to claims 106-107

   a. Same reasons as C1, and no disclosure of not including securities.

7. As to claims 110-111

   a. Same reasons as C1, and Treasuries are not tax-exempt.

D. Incorporation by reference: A1, and further, Ginsberg, Epstein, Official Notice, and art relied thereon are insufficient for *prima facie* obviousness because:

1. As to claims 15, 17-28, 65, 227

   a. Rejection is premised on a misconstrued claim.

   b. There is no teaching of a performance scenario.

   c. There is no reason to combine.

2. As to claims 17 and 23

   a. Incorporate by reference A1, and Ginsberg is not enabling for corporate debt.

3. As to claim 65

a. Incorporate by reference D1, and further there is no disclosure of system-determined purchase price of the property.

E. Incorporate by reference: A1, and further, Ginsberg, Graff, Official Notice, and art relied thereon are insufficient for *prima facie* obviousness because:

1. As to claims 2, 30, 118-177

a. No reason to combine or modify

(1) There is No Plausible Reason to Combine.

(2) Examiner's Reason to Combine is Insufficient.

(3) Examiner's Proposed Modifications Are Inoperable and Not Enabled—Something Undoable is Not Obvious.

(4) The Examiner Concedes that the Ginsberg Methodology is Inapplicable to Graff or the claims.

(5) Incorporation by reference: 1A.

b. All claim limitations were not considered; many claim elements are not disclosed in the combination.

(1) No cited art teaches generating a second...valuation for the property...with the second...computer.

(2) No cited art teaches a market-based valuation...as part of the financial analysis output... as input to the second...computer such that one could do the step of generating the second market-based valuation for the property using... the input.

(3) No cited art teaches a generating a second financial analysis output, including the second...valuation.

c. Official Notice / Insufficient Reason to Combine or Modify

2. As to claims 118-127 and 138-147

a. No teaching of a component of temporally decomposed property.

b. No teaching of the claimed system-determined purchase price for a component of temporally decomposed property.

c. No reason to combine.

d. As to claims 119, 124, 139, and 144, there also is no teaching of the claimed remainder interest.

e. As to claims 120, 125, 140, and 145, there also is no teaching of the claimed equity interest in a remainder interest.

f. As to claims 121, 126, 141, and 146, there also is no teaching of the claimed estate for years interest.

g. As to claim 122, 127, 142, and 147, there also is no teaching of the claimed term of years interest.

3. As to claims 123-127 and 143-147

a. No teaching of the claimed fractional interest.

F. Incorporation by reference: D1, E1, and F1, and further, Ginsberg, Graff, Epstein, Official Notice, and art relied thereon are insufficient for *prima facie* obviousness because:

1. As to claims 128-137:

a. No reason whatsoever to combine or modify.

2. As to claims 16, 128-137:

a. No reason to combine or modify.

b. Failure to consider the claim as a whole.

c. As to claim 16, incorporate by reference E1 and further there is no disclosure of the claimed *market-based valuation reflecting* an expected return under a performance scenario.

d. Incorporate by reference F1a, and further as to claim 128, there is no teaching of the claimed component.

i. As to claim 129, there also is no teaching of the claimed remainder interest.

ii. As to claim 130, there also is no teaching of the claimed equity interest.

iii. As to claim 131, there also is no teaching of the

claimed estate for years interest.

iv. As to claim 132, there also is no teaching of the claimed term of years interest.

e. Incorporate by reverence F1b, and further as to claim 133, there is no teaching of the claimed fractional interest.

i. As to claim 134, there also is no teaching of the claimed remainder interest.

ii. As to claim 135, there also is no teaching of the claimed equity interest.

iii. As to claim 136, there also is no teaching of the claimed estate for years interest.

iv. As to claim 137, there also is no teaching of the claimed term of years interest.

G. Incorporation by reference: C1, D1 and E1, and further, Ginsberg, Coughlan, Epstein, Official Notice, and art relied thereon are insufficient for *prima facie* obviousness because:

1. As to claims 68-75, 80-95, 112-115, and 230-257

a. No reason to combine or modify.

b. As to claims 68-71 and 230-233 there is no enabling disclosure for at least one security for corporate debt.

c. As to claims 72-75 and 234-237 there is no enabling disclosure for corporate debt.

d. As to claims 80-83 and 242-245 there is no enabling disclosure for real estate.

e. As to claims 84-87 and 246-250, the Examiner concedes that there is no teaching for property not including any securities.

f. As to claims 92-95 and 255-257, there is no teaching of tax-exempt.

(1) Ginsberg's Treasury security is not tax-exempt.

(2) Ginsberg does not enable municipal bonds as the tax-exempt.

(3) Summary.

H. Incorporation by reference: A1, C1, and E1, and further, Ginsberg, Graff, Coughlan, Official Notice, and art relied thereon are insufficient for *prima facie* obviousness because:

1. As to claims 44, 148, 152-177

   a. No reason to combine or modify.

      (1) There is No Plausible Reason to Combine.

   b. No teaching of quantitative description of risk.

      (1) No teaching...

   c. As to claim 44, Incorporate by reference A1 and E1.

2. As to claims 148-152, there is no teaching of temporally decompose

   a. As to claims 149-152

      (1) As to claim 149 there also is no teaching of the claimed remainder interest.

      (2) As to claim 150 there also is no teaching of the claimed equity interest in a remainder interest.

      (3) As to claim 151 there also is no teaching of the claimed estate for years interest.

      (4) As to claim 152 there also is no teaching of the claimed term of years interest.

3. As to claims 153-157, the Examiner's contentions regarding fractional are not understood, and therefore are traversed.

   a. As to claims 154-157

      (1) As to claim 154 there also is no teaching of the claimed remainder interest.

      (2) As to claim 155 there also is no teaching of the claimed equity interest in a remainder interest.

      (3) As to claim 156 there also is no teaching of the claimed estate for years interest.

      (4) As to claim 157 there also is no teaching of

the claimed term of years interest.

4. As to claims 158-162, there is no teaching of a second member of the group.

   a. No reason to combine.

5. As to claims 159-162

   a. As to claim 159 there also is no teaching of the claimed remainder interest.

   b. As to claim 160 there also is no teaching of the claimed equity interest in a remainder interest.

   c. As to claim 161 there also is no teaching of the claimed estate for years interest.

   d. As to claim 162 there also is no teaching of the claimed term of years interest.

6. As to claims 163-167, the Examiner's contentions regarding fractional are not understood, and therefore are traversed.

   a. As to claim 164 there also is no teaching of the claimed remainder interest.

   b. As to claim 165 there also is no teaching of the claimed equity interest in a remainder interest.

   c. As to claim 166, there also is no teaching of the claimed estate for years interest.

   d. As to claim 167 there also is no teaching of the claimed term of years interest.

7. As to claims 168-172, there is no teaching of risk-free

   a. As to claim 169 there also is no teaching of the claimed remainder interest.

   b. As to claim 170 there also is no teaching of the claimed equity interest in a remainder interest.

   c. As to claim 171 there also is no teaching of the claimed estate for years interest.

   d. As to claim 172 there also is no teaching of the claimed term of years interest.

8. As to claims 173-177, the Examiner's contentions regarding fractional are not understood, and therefore are traversed.

a. As to claims 174-177

(1) As to claim 174 there also is no teaching of the claimed remainder interest.

(2) As to claim 175 there also is no teaching of the claimed equity interest in a remainder interest.

(3) As to claim 176 there also is no teaching of the claimed estate for years interest.

(4) As to claim 177 there also is no teaching of the claimed term of years interest.

I. Incorporation by reference: A1, C, D, and E, and further, Ginsberg, Graff, Coughlan, Epstein, Official Notice, and art relied thereon are insufficient for *prima facie* obviousness because:

1. As to claims 178-180, there is no reason to combine.
a. There is No Plausible Reason to Combine.

(1). As to claim 179, further, there is no teaching of a component of another property.

J. There appears to be no apparent ground of rejection for claims 238-241, and it is believed that the rejection is a PTO mistake.

K. Other Issues

IX. Argument: Law

The legal standard for determining obviousness pursuant to 35 U.S.C. Sec. 103 is stated in *Graham v. John Deere Co.*, 383 U.S. 1 (1966). The U.S. Supreme Court held that in applying Section 103, "the scope of the prior art is to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the art is to be ascertained." *Deere* at 17. Accordingly, the CCPA has ruled that 35 U.S.C. Sec. 103 places the burden on the PTO to establish obviousness. *In re Reuter*, 651 F.2d 751, 210 USPQ 249 (CCPA 1981).

In rejecting claims under 35 U.S.C. Sec. 103, an Examiner bears the initial burden of presenting a *prima facie* case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ 2d. 1443, 1444 (Fed. Cir. 1992). Only if that burden is met, does the burden of coming forward with evidence or argument shift to the Applicant. *Id.*

> "A prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art."

In re Bell, 991 F.2d 781, 782, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) (quoting *In re Rinehart*, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976)).

When making a determination concerning obviousness, all limitations of the claim must be evaluated. 35 U.S.C. Sec. 103; *In re Miller*, 418 F.2d 1392, 64 USPQ 46 (CCPA 1969). Further, there must be some logical reason apparent from the record that would justify modification of the reference. *In re Royal,* 188 USPQ 132 (CCPA 1975).

If the Examiner fails to establish a prima facie case, the rejection is improper and will be overturned. *In re Fine*, 837 F.2d 1071, 1074; 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

A. Ginsberg and Official Notice and art relied thereon are insufficient for *prima facie* obviousness because:

1. As to claims 1, 3-14, 29, 31-42, 64, 66, 226, 228

a. The claimed invention is different from Ginsberg for any and all of the following reasons.

(1) Ginsberg's index does not teach or suggest the claimed property.

(a) Overview of Ginsberg

Ginsberg concerns "an index, updated in real time by current price data, in a manner analogous to the S & P 500 and Dow Jones 30 Industrials" (Col. 9, lines 49-51) but based on "fixed income securities" (Col. 3, line 53), e.g., bonds, bills, and notes (Col. 1, line 19).

More particularly, Ginsberg explicitly intended to address a need for "a real time

barometer of the fixed income securities marketplace for the evaluation of portfolio performance, the trends and current market conditions, and the trading of indexed future and option contracts for fixed income securities." (Col. 3, lines 17-21.)

Even more particularly, Ginsberg teaches a system that receives market data of "bids, offers and trades" in real time (Col. 3, lines 31-33; Col. 4, lines 32-37) to quantify the term structure and interest rates in real time. This data is used to form a valuation of a "hypothetical portfolio." Col. 3, line 39. The hypothetical portfolio is made up of hypothetical, "generic" securities. See Table at Col. 5; see also reference to "generic securities" at Col. 9, line 39, etc. Separately, Ginsberg determines "a basket of fixed income securities for use in support of automated trading in futures and options contacts." Col. 3, lines 45-46. In other words, Ginsberg uses his index on the hypothetical portfolio of (nonexistent) generic securities in supporting futures and options trading that can involve his baskets. Col. 3, line 66-Col. 4, line 2. Others in the market can use Ginsberg's index data in making their futures and options customer orders for trades at the futures and options financial exchanges shown in Fig. 6 and discussed at Col. 10, line 44 and line 49. Ginsberg's index system also finds the least expensive portfolio that conforms to delivery requirements to close out a futures contract (Col. 10, lines 8-19).

(b) Ginsberg does not teach or suggest the claimed property.

First, something hypothetical is not property.

Ginsberg is doing a market-based analysis of a made-up, fictitious, and "hypothetical portfolio." Col. 3, line 39. The "hypothetical portfolio" is not comprised of actual, honest to goodness securities; they are just made up, hypothetical, "generic securities." Col. 5, lines 40-42, Table I, and Col. 9, line 39. So Ginsberg is doing his market-based valuation of a hypothetical portfolio, which is not property – a requirement in one form or another in each of

Applicant's claims. Ginsberg's index (the focus of the Examiner's rejection) methodology is related to the hypothetical portfolio, and thus Ginsberg's methodology is different from that of Applicant's claimed invention, which requires generating a market-based valuation of honest to goodness property.

To distinguish the claimed property from the hypothetical portfolio relied upon by the Examiner, the Board can take notice of the plain and ordinary meaning of property in a dictionary, such as "Law Dictionary," 3rd Ed., Steven H. Gifis, 1991 (roughly contemporary with the priority date of the instant patent application). Page 380, which appended hereto, has a sample definition of property:

> "every species of valuable right or interest that is subject to ownership, has an exchangable value, or adds to one's wealth or estate."

One cannot own something hypothetical, one cannot exchange something hypothetical for something with actual value, and something hypothetical does not add to one's wealth or estate. Something hypothetical is not the claimed property.

Additionally, Ginsberg's methodology for hypothetical, "generic securities" (Col. 9, line 39), does not teach a methodology for generating a market-based valuation of the property, as required in the Applicant's claims. Indeed, Ginsberg did not use actual, honest to goodness bonds as bond market barameters for a good reason: unlike the stocks that make up the S&P 500, the life expectancies of actual bonds shorten with the passage of time, and eventually the bonds expire. One cannot very well have an index of expired bonds (an expired index?) as a barometer of the market for unexpired bonds. So Ginsberg's methodology cannot be modified to handle actual, honest to goodness bonds without having the barameter for his index change and then expire. One having ordinary skill in the art would have appreciated that Ginsberg therefore teaches away from Applicants invention. The Examiner's interpretation of Ginsberg does not work; honest to goodness bonds expire. One having ordinary skill in the art

would have known that the Examiner's idea could not work, and as per Ginsberg, would use a "hypothetical portfolio" and not property. See *U.S. v. Adams*; *In re Hedges*; and *In re Fine*.

To confirm the foregoing, the Board's attention is drawn to the Table at Col. 5 where Ginsberg specifies a generic portfolio for his index. There are bonds of different terms: 2, 3, 5, and 10 years, with respectively specified coupon rates and face values.

These generic bonds are specified to be representative of the market and are not an indication of what is actually available in the market. Col. 5, lines 59-62.

If actual bonds or other fixed income securities were by accident to coincide with Ginsberg's specified generic bonds on one day, then the bonds would not coincide the next day because the bonds would have coupon payment dates a day earlier than the coupon payment dates for Ginsberg's generic index. The same is true for the face values and coupon rates—which are specified to be representative of the market, not an indication of what is available on any given date in the market; and if available on one date, would not be available at a later time.

All bonds and fixed income securities expire in time, so if Ginsberg's index methodology handled honest to goodness property as the Examiner contends, then the bonds would constantly change and then expire, and so would Ginsberg's index. And because actual, honest to goodness bonds cannot provide a constant measure of the market, Ginsberg constructs a constant and never changing generic portfolio as "a real time barometer of the fixed income securities marketplace." Accordingly, Ginsberg's index methodology purposefully does not accommodate a valuation of actual, honest to goodness bonds or any other kind of property.

Separately, Ginsberg makes "a basket of fixed income securities for use in support of automated trading in futures and options contacts" (Col. 3, lines 45-46), and these are actual, honest to goodness property, unlike the "hypothetical portfolio" that is the subject of

Ginsberg's index valuation. Ginsberg uses his index on the "hypothetical portfolio" to support futures trading of the baskets. Col. 3, line 66 - Col. 4, line 2. Ginsberg also determines the least expensive portfolio deliverable pursuant to a futures contract at Col. 10, line 9, etc.

The Examiner's citations in Ginsberg are directed to Ginsberg's index methodology, and apparently the Examiner has not recognized that the index / hypothetical portfolio is not property. Further, Ginsberg does not teach that anyone is buying, selling, or trading hypothetical portfolios or the hypothetical generic securities, as the Examiner proposes in rejecting the Applicant's claims. If anyone were truly interested in purchasing hypothetical securities and hypothetical portfolios, as the Examiner seems to contend, undoubtedly Ginsberg or anyone else would be happy to receive money.

Furthermore, a valuation of an index is not a valuation of an options or futures contract on the index, which in turn is not a valuation of a basket of actual securities (especially because the constituents of the basket are not the same as the hypothetical constituents of the hypothetical portfolio upon which the contract is based), which in turn is not a determination of the least expensive portfolio deliverable pursuant to a futures contract.

In sum, Ginsberg does not teach the claimed combination of first and second valuations of the claimed property; all limitations of the claim must be evaluated, 35 U.S.C. Sec. 103, *In re Miller*, 418 F.2d 1392, 64 USPQ 46 (CCPA 1969); as this limitation has not been shown, a *prima facie* obviousness has not been established; and if the Examiner fails to establish a *prima facie* case, the rejection is improper and will be overturned. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

It is respectfully submitted that reversing the rejection on this ground is dispositive of patentability for all claims in all groups because all claims require property, all rejections rely on Ginsberg as a teaching of a valuation of property, and Ginsberg does not teach or suggest the claimed valuation of property. For this reason, this section is applied to,

and incorporated into, all groups.

(2) Ginsberg does not teach or suggest the claimed second digital computer and hardware used in the claimed method steps.

Second, Ginsberg's methodology is different from Applicant's claimed invention because Ginsberg does not teach or suggest the claimed second digital computer and hardware used in the claimed method steps.

At page 49 of the Final Rejection, the Examiner explains his reasoning for making up a second computer to addition to Ginsberg:

> *It is no great stretch to do with two computers what is well known to do with one,* leaving as issues, first, whether there is motivation to involve a second computer and secondly, whether, as argued by applicant, superimposing the use of a second computer on Ginsberg is contrary to the problem solved by Ginsberg.

The Examiners reasoning is in error, among other reasons, because: (1) doing the claimed market-based valuation of property with any number of computers has not been shown, and (2) doing respective valuations (a valuation and a second valuation) with respective computers (a digital electrical computer and a second digital electrical computer) is materially different from a one valuation, one computer approach somehow carried out on two computers. This difference is unmistakable because claims require using some of the output from the first computer in generating the second market based valuation, as contrasted with claim requirements for generating the first market-based valuation.

The claims require respective computers, respective valuations, and respective requirements for respectively generating the respective valuations. A method requiring respective and sequential computing is materially different in structure, input/output, and processing than carrying out a one-computer operation on two computers. Therefore, the Examiner's reasoning is incorrect, and the rejection must be reversed.

Though not in connection with Applicant's claimed property, Ginsberg does

disclose a downstream market-based valuation by "index traders, investors, pension fund managers, and other participants of the market," at Col. 9, lines 50-53. But the Examiner has not established that these folks correspond to Applicant's claimed second digital computer used in carrying out the claimed method steps. There is no *per se* rule that automating human activity is obvious, and in cases such as love, automation is clearly not obvious. Similarly, performing a valuation of things (e.g., love) is not necessarily an obvious automation, which is particularly evident from Ginsberg's recognition of non-computer intervention by these folks at Col. 9, lines 60-66.

But setting aside the amusing prospect of trying to carry out the claimed method steps by having an output means connected to these folks, etc., in downstream use of Ginsberg's index data on the hypothetical portfolio that the Examiner erroneously contends is property, the Examiner's case is even more remote from the claims.

(3) Ginsberg does not teach the claimed input (i.e., at least some of the financial analysis output as the input).

Third, Ginsberg does not teach the claimed input for the second computer. Applicant's claims require generating a ... valuation for the property...as part of a financial analysis output; electronically communicating the at least some of the financial analysis output as input to a second digital electrical computer. In contrast, Ginsberg teaches at Col. 9 that these downstream folks use "price and yield of the treasury note" (sic) in doing their market analysis. Col. 9, lines 60-61. The "treasury note" to which Ginsberg refers is not an actual security, but rather one of the generic treasury securities. Col. 9, lines 34-44.

Ginsberg's "Price and yield of the (generic) treasury note" (sic) is not Applicant's claimed input (i.e., at least some of the financial analysis output). Accordingly, there is a substantial difference between the respective inputs for the downstream use of Ginsberg's "hypothetical portfolio" and Applicant's financial analysis for a respective use in generating a

second valuation of the same property by different computers.

And to further elaborate on the previously mentioned amusing prospect of trying to carry out the claimed method steps by having an output means connected to the traders and other folks, the folks have not been shown to use Applicant's claimed input or to have any reason to use Applicant's claimed input.

In sum, Ginsberg does not teach the claimed method step involving the claimed input (i.e., at least some of the financial analysis output as input); all limitations of the claim must be evaluated; 35 U.S.C. Sec. 103, *In re Miller*, 418 F.2d 1392, 64 USPQ 46 (CCPA 1969); as this limitation has not been shown, a *prima facie* obviousness has not been established; and if the Examiner fails to establish a *prima facie* case, the rejection is improper and will be overturned. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

1A. Further as to a sub-group of the Group 1 claims 1, 3-14, 29, 31-42, 64 (i.e., Group 1 not including claims 30, 66, 226, 228), Ginsberg does not teach Applicant's claimed methodology which requires that the second market-based financial analysis reflects the claimed computation of a current market-based yield/discount rate for the property being valued.

Fourth, Applicant's invention is also different from Ginsberg because Ginsberg does not teach Applicant's claimed methodology which requires that the second market-based financial analysis reflects the claimed computation of a current market-based yield/discount rate for the property being valued. Nothing in Ginsberg says that his index traders, fund managers, and other folks are doing this claimed computation. Further, such an inference would seem to be an untenable leap because to do so from the respective input would seem to be essentially undoable by human endeavor, especially in the "real time" of Ginsberg.

In sum, Ginsberg does not teach the claimed method step involving the claimed computation of a current market-based yield/discount rate for the property being valued; all limitations of the claim must be evaluated; 35 U.S.C. Sec. 103, *In re Miller*, 418 F.2d 1392, 64

USPQ 46 (CCPA 1969); as this limitation has not been shown, a *prima facie* obviousness has not been established; and if the Examiner fails to establish a *prima facie* case, the rejection is improper and will be overturned. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

Summary for Group 1: Ginsberg Isn't Even Close to the claims as a Whole

The claimed invention is quite different from Ginsberg, which does not teach or suggest Applicant's claimed methodology for doing the valuation of property in the context of the claim as a whole.

There is no teaching or suggestion in connection with the claimed second digital computer used in the claimed method steps, or any steps involving cooperation with the second digital computer.

There is no teaching or suggestion of using the claimed input for the second valuation (i.e., at least some of the financial analysis output as input).

Indeed, Ginsberg teaches no part of the following two claimed method steps:

> generating the second ... valuation ... for the property with the second digital electrical computer and the input;
>
> generating the second financial analysis output, including the second market-based valuation, at an output means electrically connected to said second digital electrical computer.

As to claims 1, 3-14, 29, 31-42, 64, additionally there is no teaching whatsoever of the claimed:

> computation of a current market-based yield/discount rate....

Even more so, Ginsberg does not teach any of these in the context of a claim as a whole. Most of the body of the claims have not been shown in Ginsberg, which therefore is not even close to being a *prima facie* case of obviousness. The rejection must be reversed for any and all of these reasons.

a. Other Art is Not Properly Applied
Overview of Official Notice

To fill in the Ginsberg gap spanning the bulk of each independent claim, the Examiner resorts to Official Notice. Setting aside that Ginsberg does not teach the claimed methodology for property, filling in the Ginsberg gap is insufficient anyway, but for the sake of argument, the scope of the Ginsberg gap can be understood as follows. With regard to the Group 1, the claims have the following claim limitations:

(1)

> electronically communicating at least some of the financial analysis output as input to a second digital electrical computer having a second programmed processor, the second digital electrical computer storing the input in memory accessible to the second programmed processor;

in combination with (2)

> generating the second ... valuation reflecting ...for the property with the second digital electrical computer and the input; and
>
> As to Group A1, the following is required too:
>
> computation of a current market-based yield/discount rate

in combination with (3)

> generating a second financial analysis output, including the second market-based valuation, at an output means electrically connected to said second digital electrical computer.

With regard to (1) above, Ginsberg does teach second computers that receive his financial analysis output, i.e., his index data as shown in Fig. 1 is communicated to data vendors 100, and 30, an options processor 90, and a futures processor 110; via the data vendors 100, trader-brokers 120, automated trading 130, and clearing-reporting 140 are shown to receive the index. However, Ginsberg states that these are for "distribution" of his index (See Col. 5, lines 1-8), not for Applicant's claimed second ... valuation. Nothing in Ginsberg suggests that any of the downstream folks do their own second ... valuation of Ginsberg's

hypothetical portfolio using as input any output from the Ginsberg system. Accordingly, for the sake of argument, again setting aside the lack of a teaching of Applicant's methodology for the claimed property, using the claimed input and as to Group 1A, doing the claimed computation, the Examiner must also find some way to try to account for the Ginsberg gap of claim elements (2) and (3) above.

Because Ginsberg does not disclose any downstream computers doing their own second ... valuation using as input any output from the upstream Ginsberg computer, the Examiner proposes to modify Ginsberg by taking Official Notice of separate hardware possibilities. The Examiner then leaps from the separate hardware possibilities to the undisclosed method steps, in order to try to account for the claimed elements in the combination as a whole. As noted by the Examiner in the Final Rejection, page 49:

> Applicant argues that Examiner has transmogrified the one computer of Ginsberg's invention into two, connected them, and programmed them to communicate a first valuation, etc. That is essentially correct; the issue is whether it would have been obvious to one of ordinary skill in the art at the time of the invention to have done so.
>
> The Examiner provides the following reason to do transmogrify Ginsberg:
>
> ...official notice is taken that it is well *known to electronically communicate the output of one computer as input to a second computer*, which stores the output in memory. Hence it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention *to electronically communicate at least some of the financial analysis output as input ...* for the obvious advantage of making the information represented by the financial analysis output available for use by the second computer, which might be remote from the first computer, or possess capacities (e.g., greater computing power, access to confidential information) lacking in the first computer.

(Italics added for subsequent quoting of the Examiner.)

To further overcome the Ginsberg gap in PTO evidence for the claimed two computers doing respective market-based valuations of the same property, the second computer using the particularly claimed input that was output from the first computer, the Examiner proposes to modify Ginsberg based on the following:

> Official Notice is taken that it is well known for output means to connect computers... for the obvious advantage of conveniently enabling the second financial analysis output to be output in usable form. (Page 6, line 14-19.)
>
> Official Notice is taken that it is well known to electronically communicate the output of one computer as input to a second computer, which then stores the output in memory... accessible to the second computer's processor for the obvious advantage of making the information represented by the financial analysis output available for use by the second computer... (Page 7, lines 12-19.)

The Examiner does not mention who would be carrying out what he proposes, e.g., Ginsberg did not envision "index traders, investors, pension fund managers, and other participants of the market" as doing this; others are taught as distributing his index data.

(1) The Final Rejection is premised on an improper legal standard: Official Notice of each difference individually is an improper legal standard under Sec. 103 for evaluating the invention as a whole.

The test is not whether each difference individually is obvious; rather it is whether the invention as a whole is obvious. *In re Buehler*, 515 F.2d 1134 (CCPA 1975).

The Final Rejection has used Official Notice of individual, separate, and unrelated hardware possibilities to provide a reason to modify Ginsberg to carry out the undisclosed method steps in Applicant's invention as a whole. However,

> "A prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art."

In re Bell, 991 F.2d 781, 782, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) (quoting *In re Rinehart*, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976)). The Examiner has not met this legal standard.

Nothing in the cited art has "suggested the claimed subject matter" especially as a whole. Ginsberg is not particularly relevant because it does not provide any methodology applicable to the claimed property and essentially the bulk of the independent claims; but the Examiner has taken this distant teaching and used Official Notice of individual and separate hardware possibilities *strung together with guidance only from Applicant's claims*, in an

improper determination of obviousness, i.e., that the invention of the method as a whole is obvious. The Examiner's approach uses an improper legal standard for a *prima facie* case of obviousness which is prohibited by *In re Buehler.*

(2) There is no proper reason to modify Ginsberg because:

i) Official Notice based on non-analogous art cannot provide a proper motivation to modify other art.

The sole motivation for modifying Ginsberg comes from Official Notice. See Office Action pp. 5-7. Applicant challenged the Examiner's use of Official Notice to provide a reference to support the Official Notice to permit the Applicant to assess the purported motivation to modify Ginsberg. In the Amendment and Response, page 9, Applicant wrote:

> "... a proper reason for a modification of the art cannot be avoided by mere reliance on Official Notice. Therefore, if the rejection is maintained, Applicant requires a reference to support each Official Notice (or contention that it was well known) so that Applicant can determine whether the Examiner's purported reason to combine is further contradicted by said combination of references."

In response, the Examiner cited the art, but the art cited to support the Official Notice is not analogous art.

Non-analogous art and Official Notice premised thereon does not provide a proper reason to combine and/or modify Ginsberg to reach the claimed method steps regarding using two computers doing respective analyses of the same property, the second computer using as input analysis of the first computer, for property, etc. That is to say that while it may have been generally known that one could connect one computer to communicate to another via output means and memory, with processors modifying digital electrical signals, this particular use of Official Notice to reach the undisclosed method steps is improper: these references cited to support the respective Official Notice contentions cannot properly be used to provide a motivation to modify Ginsberg to one of ordinary skill in the relevant art because the

references are from non-analogous art that have not been shown to be known to one of ordinary skill in the relevant art.

Official Notice is no substitute for a reason to modify from the relevant prior art, and a patent cannot be withheld on naked Official Notice or non-analogous art for a motivation to modify the cited art.

More particularly, to support the Official Notice concerning the claimed output means the Examiner relies on "Advantages of Active LCD Technology in Electronic Transparencies." However, the Examiner has determined that the relevant art is "finance" (Page 10) and has made no showing that one having ordinary skill in the art would be familiar with, or would look to, LCD display art. Moreover, in the claim context of communicating the output as input to the second computer, an LTD video display is not relevant; a modem or the like is not mentioned in this article. Similarly, the Examiner relies on U.S. Patent No. 3,426,676, which is directed to a printer, not a modem or the like; and moreover, it has not been shown (nor can it be reasonably imagined) that one having ordinary skill in the art of the claims would be familiar with, or would look to, the art of "Decimal Point Or Comma Printing in Multi-cipher Digital Printers" (patent title). But see, e.g., *In re Benno*, 226 USPQ 683 (Fed. Cir. 1985):

> "In dismissing Dante as a reference, the court pointed out that Dante did not even hint at the problem the appellants sought to solve. Dante would not even have encountered the problem because it would not have appeared in what he was doing."

and *King Instrument Corp. v. Otari Corp.*, 226 USPQ 402 (Fed. Cir. 1985):

> "A reference is not available under 35 U.S.C. §103 if it is not within the field of the inventor's endeavor and was not directly pertinent to the particular problem with which the inventor was involved."

Neither of the Examiner's cited references are analogous art, and neither of these references provides any proper motivation to modify Ginsberg to reach the claimed method as a whole.

Similarly, to support the Official Notice regarding manipulating data / performing calculations, the Examiner's relies on "Analog Computer Techniques for Digital Computers." It has not been shown (nor can it be reasonably imagined) that one having ordinary skill in the art of the claims would be familiar with, or would look to, the art of analog computers. Indeed, this reference explicitly teaches that "very few users of personal computers are even aware of analog computers," and the Examiner has certainly not shown how, in the relevant art of the claims and/or in the financial arts of Ginsberg's fixed income securities index, one having ordinary skill would have looked to analog arts. The same is true for optical computers and "Research on Optical-Digital Computers That Would use Light Beams and Optical Pathways to Replace Electrical Signals and Wires Is being Performed by S.A. Collins Jr, Prof of Electrical Engineering at Ohio State University." Neither of these references are analogous art, and neither of these references provides any proper motivation for modifying Ginsberg to reach the claimed method as a whole.

With regard to the Examiner's use of U.S. Patent No. 4,860,238, as support for the Official Notice of certain communication between computers and memory, it has not been shown (nor can it be reasonably imagined) that one having ordinary skill in the art of the claims would be familiar with, or would look to, or even be able to comprehend the "Digital Sine Generator" (patent title) art, and this reference provides no proper reason for modifying Ginsberg to reach the claimed method as a whole.

As to U.S. Patent No. 4,860,238, it has not been shown (nor can it be reasonably imagined) that one having ordinary skill in the art of the claims would be familiar with, or would look to, or even find comprehensible such language as set out in, say, Col. 10 and on. While the '238 patent at least shows some form of linking of computers so as to be relevant to the claim, it is respectfully submitted that in order to be applicable in the relevant art, the reference must be comprehensible to one having ordinary skill in the relevant art. The Examiner has not

shown how in the relevant art of the claims and/or in the financial arts of Ginsberg's fixed income securities index, one having ordinary skill would have looked to the '238 patent or found it comprehensible.

This reference also provides no proper reason for modifying Ginsberg to reach the claimed method *as a whole.*

The Examiner has attempted to find a reason to glom Applicant's method steps onto Ginsberg by using Official Notice of hardware possibilities, and when challenged, cited non-analogous art. The non-analogous art and the respective uses of Official Notice premised thereon cannot be used as a proper reason to motivate one of ordinary skill in the art of finance to modify Ginsberg to reach the claimed invention.

In sum, it may have been known in the relevant art that one could connect one computer to communicate to another via output means and memory, with processors modifying digital electrical signals, and Ginsberg is even relevant in this regard. However, this particular use of Official Notice based on non-analogous art references to reach Applicants undisclosed method steps is improper pursuant to *In re Horn, Horn, Horn and Horn*, 203 USPQ 969 (CCPA 1979):

> "For the teachings of a reference to be prior art under 35 U.S.C. §103, there must be some basis for concluding that the reference would have been considered by one skilled in the particular art working on the pertinent problem to which the invention pertains; for no matter what a reference teaches, it could not have rendered obvious anything (at the time the invention was made) to a person having ordinary skill in the art to which the subject matter pertains unless that hypothetical person would have considered it."

The Examiner has not met his burden of the standards articulated, for example, in *In re Horn, Horn, Horn and Horn* as to why one having ordinary skill in the art of finance would have considered Active LCD Technology, Analog Computing, a Decimal Point Or Comma Printing, a Digital Sine generator, an Optical-Digital Computer, the particular communications link disclosure of the '238, together with the fixed income instrument index system Ginsberg.

Even so, there remains the method step of:

> generating the second market-based valuation reflecting computation of a current market-based yield/discount rate for the property with the second digital electrical computer and the input...

which remains overlooked and ignored and not shown in the cited art..

The Examiner's Official Notice-based reason to modify Ginsberg is improper because it is supported only by non-analogous art, and even so, it is insufficient to account for the requirements of the claims. Therefore a case of *prima facie* has not been made out, and withholding a patent based on Sec. 103 is improper and must be reversed.

ii) Art / notice cannot be combined in the absence of any reason to combine / modify.

In deciding obviousness, one must look to the relevant prior art from the vantage point in time prior to when the invention was made; hindsight obviousness after the invention is not the test. *In re Carroll*, 602 F.2d 1184 (CCPA 1979). Thus, even if it is somehow determined that any of these are analogous art (which they are not) for finance (which the Examiner determined was the relevant art in the Final Rejection at page 49), and that they teach the claimed method steps (which they do not, e.g., no methodology for a valuation of property), the Examiner still has provided no reason whatsoever as to why one having ordinary skill in the art would ever have thought to combined them with Ginsberg to motivate reaching Applicant's claimed method steps in the invention as a whole.

And as stated above, there must be some logical reason apparent from the record that would justify modification of Ginsberg. See *In re Royal*,188 USPQ 132 (CCPA 1975). See also *In re Lee; In re Rouffet; In re Kotzab.* There is nothing in any of the cited art that would suggest the Examiner's proposed combination *to reach the* claim*ed invention.* The Examiner has provided no reason pertaining to the specific art, and *Applicant's claims are the only reason to string together such widely disparate art.*

The Examiner has the burden of providing some plausible reason for selectively stringing together references on Active LCD Technology, Analog Computing, a Decimal Point Or Comma Printing, a Digital Sine generator, an Optical-Digital Computer, the particular communications link disclosure of the '238, together with the fixed income instrument index system Ginsberg. Given the exceptionally different arts and utilities involved here, it is respectfully submitted that this combination can only be explained as the Examiner exercising claim-inspired hindsight in a search for some reason to modify Ginsberg to reach the claimed invention. With no plausible reason for the combination to be used *to reach the* claim*ed invention as a whole*, the cited art simply does not provide any impetus to do what the Applicant has done. Accordingly, Examiner has not made a *prima facie* showing that the claims are obvious over the cited art, and the rejection must be reversed.

iii) There is no showing of a motivation for a non-obvious product of a material limitation.

The Board is also directed to the decisions in Guidance on Treatment of Product and Process Claims in Light of *In re Ochiai*, and *In re Brower* and 35 U.S.C. 103(b), 1184 O.G. 86 (1996):

> Interpreting a claimed invention as a whole required consideration of all claim limitations. Thus, language in a process claim which recites making or using a nonobvious product must be treated as a material limitation, and a motivation to make or use the nonobvious product must be present in the prior art for a 103 rejection to be sustained."

See also, *Ex parte Clapp*, 227 USPQ 972 (B.P.A.I. 1985).

Applicant's product is the second ... valuation and as to sub-group 1A, also is a computation of a current market-based yield/discount rate for the property. These are material limitations; "a motivation to make or use the nonobvious product must be present in the prior art for a 103 rejection to be sustained," and the Examiner has failed to show any motivation for these products. The Examiner has made up Applicant's method steps by trying to take Official

Notice of hardware possibilities, but with no motivation to make or use the nonobvious product in the cited art. Pursuant to *In re Brower* the Examiner has not made out a *prima facie* case of obviousness, and the rejection must be reversed.

Similarly, Reference is made to *Switzer et al. v. Marzall, Comr, Pats.*, 88 USPQ 170 (DC DC 1950):

> "Process utilizing old materials and processes attains new result, or at least substantially enhanced qualities of utility, and is patentable since it exhibits necessary spark of genius."

In the instant case, the second market-based valuation using the output first market-based valuation is the new result; it has a completely different utility than that of Ginsberg and *exhibits necessary spark of genius* unaddressed in the Examiner's case.

iv) The theory of obviousness is not enabled by the cited art.

"[E]ven if an invention is disclosed in a printed publication, that disclosure will not suffice as 'prior art' if it is not enabling" *e.g., Paperless Accounting Inc. v. Bay Area Rapid Transit Sys.*, 804 F.2d 659 665 (Fed. Cir. 1986). Though this is an anticipation decision, something that is not enabled cannot be obvious, either. In the instant case, the claims cannot be obvious because the Examiner's particular theory of obviousness is not enabled by the art.

For example, "Beam me up, Scotty" (Star Trek) in combination with Official Notice is not sufficient prior art to preclude a patent on an honest to goodness de-materialization/re-materialization transporter any more than Ginsberg in combination with Official Notice is sufficient to preclude a patent on an honest to goodness multi-computer system doing respective market-based valuations of property. One can look at Star Trek and Ginsberg all they want, but the cited art does not enable anyone to do what the Examiner proposes.

More particularly, for the Examiner's theory of obviousness to be correct,

Ginsberg and the Official Notice must enable an obvious implementation that can handle the claimed valuation of honest to goodness property, especially by using the particularly claimed input and computation.

But one can plainly see that the Ginsberg methodology cannot be modified to handle honest to goodness property. This is the whole reason Ginsberg's complex methodology is directed to a valuation of a hypothetical portfolio--a real one doesn't work. One can plainly see that Ginsberg is not an enabling disclosure for what the Examiner has proposed as obvious: no one would have any idea how to make the claimed invention for property by tacking on hardware to Ginsberg's index output system.

Further, if Ginsberg was somehow enabling for Applicant's claimed property, it is not enabling for the claimed method step of:

> generating the second ... valuation using the second digital electrical computer and the input...

which remains completely undisclosed in the cited art and therefore is not enabled. Also completely unknown and not enabled, as to sub-group 1A, is the valuation reflecting computation of a current market-based yield/discount rate for the property. Nothing shows the computation, the second ... valuation using the particularly specified input, i.e., the valuation etc. of the first computer.

So one can look at Ginsberg and the hardware all they want and they still would have no idea how to do this step—just like one can look at Star Trek all they want and still would have no idea how to do a transporter. The Examiner's theory of obviousness cannot be correct because the theory is not enabled by the cited art.

v) The proposed modification would destroy Ginsberg's intent, purpose, and function.

Having the Ginsberg computer spit out its hypothetical portfolio index data to

another computer which somehow folds the input into another valuation of the index would make no sense, and would defeat the intent, purpose, and function of Ginsberg. From the record, no one imaginable would get the S & P 500 or Dow and use it to do a valuation on their own computer of the same thing (if one could somehow compute the S & P 500 or Dow by using it to recompute itself). Similarly, this makes no sense for the Ginsberg hypothetical portfolio bond index either, and any such approach would destroy the intent, purpose and function of the respective index. The Examiner's position is contrary to *In re Gordon.*

There is no plausible explanation as to why anyone would receive Ginsberg's real time index data and then attempt to redo it, especially in real time, somehow using it in redoing it. In view of Ginsberg's purpose of providing a "real time barometer" of the market, there is no reason to recompute it when they already have it. There is no plausible explanation because doing the modifications that the Examiner proposes makes no sense: there can be no explanation.

Similarly, there can be no explanation, from the record, as to why one would get real time index data as a "real time barometer of the market," and then recompute it by somehow folding in the index data into the market-based bids, asks, and trades for individual bonds because combining these with the index data would only skew the index off the market data—defeating the purpose of Ginsberg's index system as "a real time barometer of the fixed income securities market place." Col. 3, lines 16-17. More so, the Examiner has offered no particular way one could go about combining the index data with the bids, asks, and trades to form a second market-based valuation, especially without skewing the valuation that is intended by Ginsberg to be a good indication of the market.

Recomputing what you already have to make it less accurate (by somehow folding in the index output into a second market-based valuation) makes no sense at all. Given the enormous undertaking of producing market-based bond index data in real time, for the

purpose of being a barometer for the market, one skilled in the art would have all the reason in the world to never to do what the Examiner has proposed by taking Official Notice to the hardware. The proposed modification makes no sense, and is not a *prima facie* case of obviousness.

- **Examiner's Position**

The Examiner's position is set out in the Final Rejection pp. 50:

> Applicant argues that if you have two computers doing two valuations, you do not have a real time barometer of the marketplace (the need addressed by Ginsberg), but a market situation for making a sale. Applicant's argument here conflicts with Applicant's claim 1... with no reciting of a method for making a sale...."

- **Applicant's Response**

The Examiner misses the point. Applicant's argument here is not directed to another unaccounted claim limitation. Rather, Applicant's point is that the Examiner's purported reason to modify Ginsberg makes no sense. It would defeat the intent, purpose, and function of Ginsberg to address the need for "a real time barometer of the fixed income marketplace" to modify Ginsberg to have a second computer receive the first market-based valuation and use it to do a second market-based valuation using the output index data of the first computer—then you would have 2 barometers, the second skewed by using the index data output by the first.

Having two computers do market-based valuations of the same property, one computer using the output of the other in the downstream valuation, would make sense in the situation of respective analyses for a potential sale, e.g., where one computer was using a market-based valuation for a bid on an asset, and the other was doing its own market-based valuation in connection with the received bid. To reach such a configuration, Ginsberg must be modified for some reason, and the Examiner cannot propose such a modification because there is no sale between the people operating Ginsberg's upstream computer that is outputting index data and the traders, managers, and other folks who are using the index data. So for the

Examiner's proposed modification of Ginsberg to make sense and consider all claim limitations, for a *prima facie* case, the Examiner would need to find some reason modify Ginsberg's index computer into two computers, e.g., involved in doing the analysis for a potential sale of property. The Examiner cannot make such a leap without destroying the purpose, intent, and function of Ginsberg, and so his proposed modification is insufficient for withholding a patent under Sec. 103.

- **Examiner's Further Position**

The Examiner goes on to say that Ginsberg nonetheless discloses making sales. See in the Final Rejection pp. 50.

- **Applicant's Further Response**

This too is beside the point of the invalid reason for modifying Ginsberg, given the particular disclosure to which the Examiner refers. However, for completeness, the Board is directed to the section upon which the Examiner relies, namely Col. 9, line 60- Col. 10, line 7 as follows.

> Through an interconnected data network augmented with access to centralized brokers by telephone connection, the system offers automated electronic executions of futures and options on the index for e.g. treasury notes and its corresponding cash security equivalents.
>
> By viewing through vendors in real time the price and yield of the treasury note, index traders, investors, pension fund managers, and other participants make determinations of market valuations of the duration-sized portfolio. In so doing, bid, offer and execution decisions are implemented instantaneously by traders. These decisions are enacted through computer terminals that are interconnected through international data networks and processors to effectuate in real time the display of quantities for bids and offers and the "hitting" and "taking" of those bids and offers, which then result in executed trades. These trades are then electronically displayed and distributed to a clearing processor and at the same time to data vendors for redistribution to the worldwide financial community.

The sales at issue in Ginsberg are not sales of the hypothetical portfolio (ignoring for the moment that the generic bonds in hypothetical portfolios are not property), but are instead sales of futures and options contracts. So the first market-based valuation in

Ginsberg is on the index (which is not property), whereas the sale is of futures or options contracts. However, Appllicant's claims require the same property in the valuation and sale. So the Ginsberg system cannot be modified into half of a bid/ask-type system simply because downstream traders sell futures and options contracts among themselves by using the Ginsberg portfolio to support the sales of the contracts based on the hypothetical index.

Again, the futures and options contracts are different from the hypothetical portfolio, both of which are different from the baskets of actual securities in block 950 of Ginsberg. Accordingly, market-based valuations of each of these are not the same. Because the instant claims require that the two market-based financial valuations be directed to the same property and Ginsberg's market-based valuation is for the hypothetical portfolio, it is the hypothetical portfolio portion of Ginsberg that would require the modification into half of the bid/ask-type system of 2 computers doing 2 market-based analyses, etc. Such a modification would require that Ginsberg's index data be output in the form of bids and asks for trades vis-a-vis the index traders etc., who also would have to be armed with their own computers doing the Applicant's particular claimed output. But Ginsberg's index output was never intended to be on the opposite end of a sale from the traders, etc., especially because the subject of the Ginsberg valuations is the hypothetical portfolio, which is not even property. Therefore, the Examiner has not made out a case of *prima facie* obvious.

vi) The proposed modification is insufficient to explain all claim requirements.

A proper reason to combine or modify cited art must be sufficiently complete as to encompass the invention as a whole. The Examiner's theory of a reason to combine or modify Ginsberg is insufficient because it falls short of explaining (and indeed does not consider or account for) the claimed method step claim of:

generating the second ... valuation ...with the second digital electrical

computer and the input

and this step is necessary for the subsequent step that also has not been accounted for in the Examiner's theory:

> generating the second financial analysis output, including the second market-based valuation, at an output means electrically connected to said second digital electrical computer

and of course then also does not consider the claimed invention as a whole.

As to sub-group 1A, the Examiner's case is even worse because there is no hint in the cited art of the claimed valuation reflecting computation of a current market-based yield/discount rate for the property.

That is, the Examiner's proposed reason for the Ginsberg modification is:

> making the information represented by the financial analysis output available for use by the second computer, which might be remote from the first computer, or possess capacities.

See Final Rejection at page 7.

The Examiner's above-quoted theory does not explain why anyone would be using the claimed input (i.e., the output first valuation from the first computer) at a second computer in generating a second ... valuation. The insufficiency of the Examiner's proposed reason is heightened because it also ignores the property requirement, as to sub-group 1A, and has no computation, etc.). Indeed, there is no disclosure in any cited art or in the Official Notice whatsoever that would enable one to perform the steps set out above. Hardware possibilities do not enable this step, as set out above. These claim limitations have simply been ignored in the cited art and ignored in the proposed reason to combine.

Further, one would never use the output Ginsberg index data to do another valuation of the same thing with a second computer for any reason apparent from the cited art, including for the reason of "making the information represented by the financial analysis output available for use by the second computer, which might be remote from the first computer, or

possess capacities." For example, no one imaginable would have received the S&P 500 and use it to somehow recompute the S&P 500 again in some way.

More so, the Examiner's proposed reason to modify Ginsberg presumes the existence of the claimed second digital electrical computer for using the input. That is, the Examiner's above-quoted reason to modify refers to "the second computer," but has no antecedent. The Examiner just assumes that one has been disclosed in the cited art, but no such disclosure is in the record of this case.

A proper reason to combine or modify cited art must be sufficiently complete as to encompass the invention *as a whole*. The Examiner's theory of a reason to combine does not account for more than an entire method step, and the theory is therefore insufficient and not a *prima facie* case of obviousness.

Summary: Official Notice / Other Art

The Official Notice and other art cited in support therefor is improperly applied because the test is not whether each difference individually is obvious, as the Examiner has attempted, but whether the invention as a whole is obvious. *In re Buehler*, 515 F.2d 1134 (CCPA 1975). Further, Official Notice based on non-analogous art cannot provide a proper motivation to modify other art, i.e., Ginsberg. Even if some or all of the cited art is found to be analogous art, the rejection is improper as there is no reason to combine the particularly cited art. Even if the foregoing could be overcome, the combination according to the Examiner's theory is not enabled, and if anyone could figure out how to do the claimed invention according to the Examiner's theory, it would destroy the explicit teachings of Ginsberg's purpose, function, and intent. The theory is not even sufficient to account for more than one method step. For any and all of these reasons, the Examiner has not made out a *prima facie* case of obviousness.

b. Even if all the art and Official Notice and supporting art is applied, however, and for whatever reason and even for no reason whatsoever, the art falls short of Applicant's claimed invention as there is no disclosure of many claim elements.

There is no disclosure of any methodology for generating a ...valuation of the property with one computer in the particularly claimed cooperation with the second computer. Ginsberg's methodology is for an index and a hypothetical portfolio of hypothetical securities, not the claimed property.

As more particularly pointed out in the claims, Applicant's valuation is to enable feeding particular input to the second computer, and there is no disclosure or suggestion of

> generating the second ... valuation ...for the property with the second digital electrical computer and the input;

Also, there is no disclosure of the claimed use of this step:

> generating the second financial analysis output, including the second ... valuation, at an output means electrically connected to said second digital electrical computer

As to sub-group A1, there also is no disclosure of the

> valuation reflecting computation of a current market-based yield/discount rate

With no disclosure of these, no combination of Ginsberg and the Official Notice and art therefore can render these obvious, even if some way could possibly be imagined to do everything the Examiner has proposed with all the Official Notice he has tried to concoct and support. No *prima facie* case of obviousness has been made out because even if all the art were applied with all the Official Notice, modified for whatever reason as has been stated, the art still falls short of Applicant's claimed invention as there is no disclosure of many claim elements.

Of course if the Examiner cannot account for all the claim limitations individually, there has been no showing of obviousness of the claim as a whole.

The Examiner's Official Notice-based reason to modify Ginsberg is insufficient to

account for the above-mentioned claim steps, and the law requires that limitations in claims distinguishing over the cited art cannot be ignored. *In re Boe et al.*, 505 F.2d (CCPA 1974). The Examiner has not considered all claim limitations, and has not accounted for any claim as a whole, and therefore a case of *prima facie* has not been made out, and withholding a patent based on Sec. 103 is improper and must be reversed.

Summary Conclusion Regarding Ginsberg in combination with whatever is cited for whatever reason.

Ginsberg's methodology is directed to an index and a hypothetical portfolio, not property as the Examiner seems to believe. Examiner has not shown (nor can it be imagined) how Ginsberg's index methodology could do a valuation of property. Ginsberg is not even close to disclosing a workable methodology for almost half of each independent claim.

The particular use of Official Notice in the Final Rejection cannot serve as a reason to modify Ginsberg to make up the other half of the claimed invention because the Official Notice is premised on non-analogous art, combined with no particular reason and insufficient explanation, in a way that makes no sense and would destroy and render Ginsberg inoperable for its intended purpose, intent, and function, and even so does not account for all the claim limitations.

The rejection falls short of a case of *prima facie* obviousness pursuant to 35 U.S.C. Sec. 103 or the contemplation of the Supreme Court in *Graham v. John Deere Co.,* 383 US 1 (1966), and therefore the rejection must be reversed.

2. Further as to claims 1, 8, and 14

The Examiner asserts in the Final Rejection at page 15: "Treasury securities are generally exempt from state taxes; municipal bonds are in many cases exempt from federal income tax."

The arguments set forth for Group A are reasserted here with equal force, as they are equally applicable here.

a. Ginsberg's Treasury security is not tax-exempt.

Ginsberg is directed to a hypothetical portfolio of "generic" securities, and this is not considered tax-exempt because it is not even property. The hypothetical portfolio uses hypothetical Treasuries, which are not real either, and therefore are not tax-exempt. And even if they were honest to goodness Treasuries, Treasuries are not considered tax-exempt securities either. Despite the Examiner's assertion to the contrary in trying to make out an obviousness case in the Final Rejection at pages 6 and 51, the Board is directed to see, e.g., Treasury regulation section 1.61-7(b)(3), which provides, in general, that interest on United States obligations issued after March 1, 1941, is fully taxable. Nor (of course) is there any tax exemption for hypothetical stuff. See "Fundamentals of Municipal Bonds," Public Securities Association, 1989, page 7:

> **THE FEDERAL TAX EXEMPTION**
>
> The principal characteristic that has traditionally set municipal securities apart from all other capital market securities is the federal tax exemption: the interest income on municipal bonds has historically been exempt from federal income tax. Evidence of the significance of this characteristic is reflected by the fact that municipal securities are often commonly referred to simply as "tax-exempt bonds."

See also "The Handbook of Fixed Income Securities," Frank J. Fabozzi, 5th Ed. (1997), page 161:

> The U.S. bond market can be divided into two major sectors; the taxable bond market and the tax-exempt bond market. The former sector includes bonds issued by the U.S. government, U.S. government agencies and sponsored enterprises, and corporations. The tax-exempt bond market is one in which the interest from bonds that are issued and sold is exempt from federal income taxation. Interest may or may not be taxable at the state and local level. The interest on U.S. Treasury securities is exempt from state and local taxes, but the distinction in classifying a bond as tax-exempt is the tax treatment at the federal income tax level.

Pursuant to the Treasury regulations and treatise views contrary to the Examiner's contention, the Examiner has not made out a *prima facie* case of obviousness concerning the tax-exempt requirement of the claims.

b. Ginsberg does not enable municipal bonds as the tax-exempt.

Ginsberg does mention "municipal bonds" at Col. 1, line 23, as one kind of fixed income securities and does state the following at Col. 1, lines 50-55, that:

> Treasuries have characteristic properties that make them especially useful for the purposes of the present invention and, therefore, are used exclusively in the following discussions, with the fundamental tenant that the principles may be applied to other types of fixed income securities without departing from the inventive concepts.

However, as the Examiner recognizes, "Ginsberg does not disclose taking a non-zero risk into account." See Ginsberg too at Col. 1, lines 56-60, that:

> One important attribute of treasuries, in the context of the present invention, is the minimal and uniform default risk; the issuance of U.S. government paper removes the *default risk as a defining criteria in the relative pricing* of treasuries in the market.

As Ginsberg does not mention how to handle "the default risk as a defining criteria," as the Examiner recognizes, Ginsberg does not provide a teaching that would enable one to make and use that which is the subject of the instant claims.

To place this in perspective, the Board can take notice of numerous municipal bond defaults such as that of Washington Public Power Supply System defaulting on $2.25 billion in bonds. As per Ginsberg and the Examiner, such risk is a "defining criteria." It is respectfully submitted that no one having any skill in the art would desire or think it obvious to try to realize a Ginsberg methodology that cannot handle things like multi-billion dollar defaults.

Municipal bonds involve default risk, and the Examiner conceded in Paragraph 47 of the first Office Action that the valuation methodology in Ginsberg "reflects a risk-free rate in as much as Ginsberg does not disclose taking a non-zero risk into account." Accordingly,

Ginsberg clearly does not disclose how to apply the Ginsberg invention to bonds with non-zero default risk, in particular municipal bonds. Thus Ginsberg does not enable a method for valuing bonds that must involve default risk, e.g., municipal bond valuation.

It is respectfully submitted that Ginsberg does not provide an enabling disclosure for handling tax-exempt securities, and as apparently recognized by the Examiner. A *prima facie* case of obviousness has not been shown, and thus the rejection must be reversed. More to the point, the Examiner has not established that the cited art would have obviously enabled one with ordinary skill in the art to carry out Applicant's method.

c. Summary.

In sum, Ginsberg's Treasury security is not tax-exempt, handling municipal bonds have not been shown as obviously enabled, and the Examiner has not made out a *prima facie* case of obviousness concerning the tax-exempt requirement of the claims in this group.

3. Further as to claims 4, 6, 10, 12, 32, 34, and 40

a. Incorporate by reference A1, and Ginsberg is not enabling for corporate debt.

Ginsberg does mention "corporate bonds" at Col. 1, line 23, as one kind of fixed income securities, and does state the following at Col. 1, lines 50-55, that:

> Treasuries have characteristic properties that make them especially useful for the purposes of the present invention and, therefore, are used exclusively in the following discussions, with the fundamental tenant that the principles may be applied to other types of fixed income securities without departing from the inventive concepts.

However, as the Examiner recognizes, "Ginsberg does not disclose taking a non-zero risk into account." See Ginsberg too at Col. 1, lines 56-60, that:

> One important attribute of treasuries, in the context of the present invention, is the minimal and uniform default risk; the issuance of U.S. government paper removes the default risk as a defining criteria in the relative pricing of treasuries in the market.

As Ginsberg does not mention how to handle "the default risk as a defining

criteria," as the Examiner recognizes, Ginsberg does not provide a teaching that would enable one to make and use that which is the subject of the instant claims.

To place this in perspective, the Board can take notice of numerous corporate bond defaults such as that of Enron last year, which amounted to $9.9 billion (excluding bank credits and derivatives, of course). As per Ginsberg and the Examiner, such risk is a "defining criteria." It is respectfully submitted that no one having any skill in the art would desire or think it obvious to try to realize a Ginsberg methodology that cannot handle things like multi-billion dollar defaults.

Corporate debt involves default risk, and the Examiner conceded in Paragraph 47 of the first Office Action that the valuation methodology in Ginsberg "reflects a risk-free rate in as much as Ginsberg does not disclose taking a non-zero risk into account." Accordingly, Ginsberg clearly does not disclose how to apply the Ginsberg invention to bonds with non-zero default risk, in particular corporate debt. Thus Ginsberg does not enable a method for valuing bonds that must involve default risk, e.g., corporate debt valuation.

It is respectfully submitted that Ginsberg does not provide an enabling disclosure for handling tax-exempt securities, and as apparently recognized by the Examiner. A *prima facie* case of obviousness has not been shown, and thus the rejection must be reversed. More to the point, the Examiner has not established that the cited art would have obviously enabled one with ordinary skill in the art to carry out Applicant's method.

4. Further as to claims 64, 66, and 226, 228

a. Incorporate by reference A1, and there is no financial analysis output having the system-determined purchase price for the property in consummating the sale either.

The claims of this Group all require a system determined purchase price in consummating a sale for the claimed property, which is not shown by Ginsberg. First, the only sales related to Ginsberg's index system output are of options and futures (see Fig. 6, which

illustrates the Options Exchange and the Futures Exchange, and related discussion). Ginsberg's index system does not carry out the operations of the Exchanges. However, the sales of options and futures are not the same subject as the subject matter of Ginsberg's valuation of the hypothetical portfolio of generic bonds for his index (setting aside for the moment that this is not property). The claims of this group require that the price and valuation are directed to the same property.

Second, although Ginsberg does compute a "price" for his hypothetical portfolio, no one is consummating a sale of the hypothetical portfolio. Indeed, such a sale is impossible, because something hypothetical is not property, as discussed above. The hypothetical portfolio is used as a measure of performance for a basket of securities, upon which futures and options are based.

Third, in the Final Rejection at page 51, line 13-page 52, line 4, the Examiner argues that "Ginsberg discloses his system determining a purchase price (col. 9, lines 45-59, presumably in particular line 47), and then using that purchase price in consummating sales (col. 9, line 60 through col. 10, line 7)." However, the "price" in Column 9, line 47 of Ginsberg does not include the adjective "purchase" or "sale" because it is not a transaction price, but rather is an index valuation of a portfolio of generic securities based on previous transactions (in fact, the words "purchase" and "sale" never appears in Col. 9, lines 45-59). The price/index valuation derived by Ginsberg is then used by "index traders, investors, pension fund managers, and other participants (to) make determinations of market valuations of the duration sized portfolio. In so doing, bid, offer and execution decisions are implemented instantaneously by traders. These decisions are enacted through computer terminals.." (col. 9, lines 61-65). But Ginsberg does not disclose a system-determined purchase price, system-determined bid valuations, system-determined ask valuations, or system-determined transaction valuations, because the Ginsberg invention was not designed for this purpose.

In sum, Ginsberg does not teach a system determined purchase price in consummating a sale of the same property as required in the method steps. Accordingly, a *prima facie* case of obviousness has not been shown.

B. Incorporation by reference: A1 and further, Ginsberg, Lupien, Official Notice, and art relied thereon are insufficient for *prima facie* obviousness because:

1. As to claims 57-63

a. No cited art even mentions the claimed offering document or any means or method whatsoever for generating the financial analysis output including the offering document.

With regard to claims 57-58, the Examiner has not met the statutory burden of making a case of *prima facie* obviousness for all claims of Group based on Ginsberg in view of Lupien because all of Applicant's claims require generating the financial analysis output including the offering document, and no cited reference mentions any offering document or method or means for generating one.

The Examiner relies on Lupien for an enabling disclosure of a computer system capable of generating an offering document and explains at page 51 of the Final Rejection that Lupien will issue buy and/or sell orders.... (Column 3, lines 31-42). Applicant does not explain how an offering memorandum is to be distinguished from what Lupien inarguably does mention."

The Examiner's contention is respectfully traversed because issuing buy/sell orders has nothing to do generating an offering document, and terminology like "offering memorandum" and "offering document" are well understood in arts pertaining to finance.

With regard to the terminology, the term "offering document" is a generic term well known and often used to describe various forms of information disclosure about a proposed issuance of securities mandated by law, as opposed to purchases and sales of securities in the secondary market. (See, e.g., the Securities Act of 1933, 15 U.S.C. §§77(a)

et. seq. (the "Act")). The Board is requested to take notice that the term "offering document" is clearly known and understood in the art from its use in the law, for example, see Section 18(r) of the Act, (77 U.S.C. §77r(d)), and as generally having the meaning given to the term "prospectus" in Section 2(a)(10) of the Act (15 U.S.C. §77(b)(10). (A prospectus is defined in Section 2(a)(10) of the Act generally as any prospectus, notice, circular, advertisement, letter or communication (whether written or by radio or television) which offers a security for sale.) An offering document typically states a fixed price at which the securities are offered to all prospective investors as compared to securities sold in the secondary market which are sold at whatever price a willing buyer and seller agree upon. It also usually contains financial information about the issuer, risk factors to consider in deciding whether to invest in the securities being offered, information about the use of the proceeds of the offering, a description of the business of the issuer, a discussion by management of the issuer's financial condition and results of operations, and information about the directors and officers of the issuer. It also serves as a marketing tool for the company proposing to issue the securities. The form the offering document will take depends on the nature of the security and how it is being offered. One type of offering document is a prospectus, which is required when the security being issued is required to be registered with the U.S. Securities and Exchange Commission ("SEC") under Securities Act of 1933. Section 5(b)(2) of the Act (15 U.S.C. §77e(b)(2)) prohibits the sale of securities required to be registered unless a prospectus is delivered. The requirements for a prospectus are set forth in Section 10 of the Act and the forms promulgated by the SEC. Other types of offering documents are used to obtain an exemption from registration of the securities. For example, under Regulation A promulgated by the SEC under the Act, a conditional small issue exemption from registration is available for the issuance of securities if certain criteria are met. Additionally to qualify for the exemption an offering circular containing the information required on form 1A under Rule 253 under the Act must be provided to potential

investors. Still other types of offering documents are used by issuers when offering securities that are exempt from registration in order to provide basic information to the proposed purchaser of the securities. As to an "offering memorandum," see, e.g., Federal Reserve Bank Interpretation Letters, Federal Reserve Board. August 30, 1996. Michael A. Becker, Esq., concerning the application of the Board's Regulation G (12 CFR Part 207) to purchasers of certain debt securities:

> Board staff is of the view that it is not necessary for investors who purchase the Notes in a transaction in compliance with SEC Rule 144A to register as Regulation G lenders. As noted in your letter, the Rule 144A offering is similar in many ways to a public offering, including the issuers' printing of an offering memorandum containing information that would be required for an SEC-approved prospectus and the broker-dealer's customary due diligence investigations. In addition, because the issuer will not use the proceeds of the Notes to purchase or carry margin stock, no question arises about compliance with the margin requirements applicable to purpose credit.

The attention of the Board is drawn to Specimens 5 and 6 in the instant patent application for examples of offering documents, and the Board is invited to consider whether Lupien enables a method for generating such documents as the Examiner contends when Lupien does not mention issuing securities.

In general, under the Act only issuers and underwriters are required to provide information to potential investors, as contrasted with persons reselling securities in the secondary market, who are expressly exempt from such disclosure requirements.

Lupien, on the other hand, is an automated trading system designed specifically to execute buy and sell orders in the open market at whatever price a willing buyer and seller agree to—which only can occur in a secondary market. Lupien processes buy and/or sell orders for trading outstanding securities; it does not have anything whatsoever to do with generating a document containing information about an issuer of securities and the securities being offered for use as an offering document.

But playing through the Examiner's thinking for the sake of argument, such an interpretation of Lupien would involve generating an offering document every time one did buy and sell orders in the open market, e.g., reselling shares in IBM. This would be unimaginably cumbersome. In the real world, no one would imagine generating an offering document where there is no offering—just a resale. Thus, the Examiner's understanding of Lupien is untenable.

Further, Lupien does not disclose or suggest the method step involving a system generated purchase price for the property, especially in combination with generating an offering document. So far as the cited art shows, nothing prior to Applicant had this capability.

Ginsberg also does not mention any system generating an offering document. Moreover, modifying Ginsberg to enable generating an offering document would especially make no sense because Ginsberg pertains to a hypothetical portfolio of non-existent securities, i.e., they are not property, cannot be sold, cannot be part of an offering, and so of course there is no generating an offering document. Ginsberg's securities index premised on a hypothetical portfolio has nothing to do with IPOs and the like, where an offering document could be found.

Playing along with the Examiner's contention for the sake of argument, though, note that Ginsberg is dealing particularly with hypothetical Treasuries, and Treasuries never have offering documents.

The Examiner's proposed combination of two teachings that do not mention or plausibly involve generating an offering document is not easy to explain, but it is clear that no *prima facie* case of obviousness has been presented because neither Ginsberg nor Lupien even address initial offerings of securities, let alone in combination with a system-generated purchase price.

Further, no proper reason has been provided from the cited art to suggest combining or modifying Lupien and Ginsberg to reach the claimed invention as a whole. In the Final Rejection at page 21, the Examiner explains at that "it would have been obvious... for the

advantage of profiting from the purchase or sale of property." But if that rationale were acceptable, then all commercial activity involving the purchase or sale of property since the dawn of time would be an obvious consequence of the profit motive too. "Profiting" does not explain why anyone would have thought of Ginsberg, thought of Lupien, and then further thought of some modification to reach Applicant's invention as a whole. With neither of these mentioning or plausibly being warp-able into Applicant's method steps involving generating... an offering document in connection with a system-generated purchase price, the Examiner has therefore engaged in impermissible hindsight, and has not made out a case of *prima facie* obviousness.

Moreover the references are not combinable to reach Applicant's invention without destroying their respective purposes, intents, and functions. Ginsberg is directed to "a real time barometer...for the evaluation of portfolio performance, the trends and current market conditions, and the trading of indexed future and option contracts" (Col. 3, lines 17-21), none of which ever have an offering document or offering memorandum. Assuming for the moment that Lupien were to enable a computer system capable of generating the financial analysis output including the offering document (which it does not), SEC regulations do not apply offering document requirements to Ginsberg's purposes, intents, and functions: "a real time barometer of the fixed income securities marketplace for the evaluation of portfolio performance, the trends and current market conditions, and the trading of indexed future and option contracts for fixed income securities." (Col. 3, lines 17-21.) In other words, the purpose, intent, and function of Ginsberg's computer output index data would never be combined with generating an offering document pursuant to SEC regulations.

Conversely, there appears to be no integratable approach to combining Lupien's buy and / or sell orders with the Ginsberg "real time barometer...for the evaluation of portfolio performance, the trends and current market conditions, and the trading of indexed future and

option contracts." Lupien's buy and / or sell orders would never be combined with generating an offering document pursuant to SEC regulations.

And neither Ginsberg nor Lupien would go further to combine generating the financial analysis output including the offering document with the claimed system-generated price.

In sum, no cited art even mentions the claimed generating the financial analysis output including the offering document, especially in connection with the claimed system-generated price and other elements of the claims of this group. No proper reason has been shown in the cited art that would lead one to combine these patents to make the claimed invention. And no case of *prima facie* case of obviousness has been made out.

b. No cited art teaches or suggests the claimed controlling a computer... to compute a system-determined purchase price for the property in consummating a sale.

The claims of this Group all require a system determined purchase price in consummating a sale for the claimed property, which is not shown by Ginsberg.

First, the only sales related to Ginsberg's index system output are of options and futures (see Fig. 6, which illustrates the Options Exchange and the Futures Exchange, and related discussion). Ginsberg's index system does not carry out the operations of the Exchanges. However, the sales of options and futures are not the same subject as the subject matter of Ginsberg's valuation of the hypothetical portfolio of generic bonds for his index (setting aside for the moment that this is not property). The claims of this group require that the price and valuation are directed to the same property.

Second, although Ginsberg does compute a "price" for his hypothetical portfolio, no one is consummating a sale of the hypothetical portfolio. Indeed, such a sale is impossible, because something hypothetical is not property, as discussed above. The hypothetical portfolio is used as a measure of performance for a basket of securities, upon which futures and options are

based.

Third, in the Final Rejection at page 51, line 13-page 52, line 4: the Examiner argues that "Ginsberg discloses his system determining a purchase price (col. 9, lines 45-59, presumably in particular line 47), and then using that purchase price in consummating sales (col. 9, line 60 through col. 10, line 7)." However, the "price" in Column 9, line 47 of Ginsberg does not include the adjective "purchase" or "sale" because it is not a transaction price, but rather is an index valuation of a portfolio of generic securities based on previous transactions (in fact, the words "purchase" and "sale" never appears in Col. 9, lines 45-59). The price/index valuation derived by Ginsberg is then used by "index traders, investors, pension fund managers, and other participants (to) make determinations of market valuations of the duration sized portfolio. In so doing, bid, offer and execution decisions are implemented instantaneously by traders. These decisions are enacted through computer terminals..." (See Col. 9, lines 61-65.) But Ginsberg does not disclose a system-determined purchase price of the property, system-determined bid valuations, system-determined ask valuations, or system-determined transaction valuations, because the Ginsberg invention was not designed for this purpose.

In sum, Ginsberg does not teach a system determined purchase price in consummating a sale of the same property as required in the method steps. Accordingly, a *prima facie* case of obviousness has not been shown.

c. There is no proper reason to modify or combine.

The law is clear that a reason to combine cited art is required. See *In re Lee; In re Rouffet; In re Kotzah.* The Examiner has not cited any reason or motivation to combine the cited art, and therefore has not made out a *prima facie* case of obviousness.

The failure to cite a reason or motivation was noted in the Amendment and Response, but no answer was provided, nor can one be imagined. Because a system determined purchase price in consummating a sale of the same property is not shown, the

unshown requirement cannot provide the motivation. Further, problems with the Examiner's proposed combination / modification have already been pointed out above, and adding another citation does not mitigate the previously mentioned problems. The rejection is contrary to *In re Lee; In re Rouffet; In re Kotzah* and must be reversed due to the absence of a reason or motivation to combine Ginsberg, Lupien, the Official Notice, and the art therefore to reach the invention *as a whole*.

2. Further as to claims 59 and 61

a. Incorporate by reference A1, and Ginsberg is not enabling for corporate debt.

Ginsberg does mention "corporate bonds" at Col. 1, line 23, as one kind of fixed income securities, and does state the following at Col. 1, lines 50-55, that:

> Treasuries have characteristic properties that make them especially useful for the purposes of the present invention and, therefore, are used exclusively in the following discussions, with the fundamental tenant that the principles may be applied to other types of fixed income securities without departing from the inventive concepts.

However, as the Examiner recognizes, "Ginsberg does not disclose taking a non-zero risk into account." See Ginsberg too at Col. 1, lines 56-60, that:

> One important attribute of treasuries, in the context of the present invention, is the minimal and uniform default risk; the issuance of U.S. government paper removes the default risk as a defining criteria in the relative pricing of treasuries in the market.

As Ginsberg does not mention how to handle "the default risk as a defining criteria," as the Examiner recognizes, Ginsberg does not provide a teaching that would enable one to make and use that which is the subject of the instant claims.

To place this in perspective, the Board can take notice of numerous corporate bond defaults such as that of Enron last year, which amounted to $9.9 billion (excluding bank credits and derivatives, of course). As per Ginsberg and the Examiner, such risk is a "defining criteria." It is respectfully submitted that no one having any skill in the art would desire or think

it obvious to try to realize a Ginsberg methodology that cannot handle things like multi-billion dollar defaults.

Corporate debt involves default risk, and the Examiner conceded in Paragraph 47 of the first Office Action that the valuation methodology in Ginsberg "reflects a risk-free rate in as much as Ginsberg does not disclose taking a non-zero risk into account." Accordingly, Ginsberg clearly does not disclose how to apply the Ginsberg invention to bonds with non-zero default risk, in particular corporate debt. Thus Ginsberg does not enable a method for valuing bonds that must involve default risk, e.g., corporate debt valuation.

It is respectfully submitted that Ginsberg does not provide an enabling disclosure for handling tax-exempt securities, and as apparently recognized by the Examiner. Or stated another way, the Examiner has failed to establish that the cited art would obviously enable one having ordinary skill in the art to make or use Applicant's claimed invention. Accordingly, a case of *prima facie* has not ben made out and the rejection myst be reversed.

3. Further as to claim 63

The Examiner asserts in the Final Rejection at page 15: "Treasury securities are generally exempt from state taxes; municipal bonds are in many cases exempt from federal income tax."

The arguments set forth for Group are reasserted here with equal force, as they are equally applicable here.

a. Ginsberg's Treasury security is not tax-exempt.

Ginsberg is directed to a hypothetical portfolio of "generic" securities, and this is not considered tax-exempt because it is not even property. The hypothetical portfolio uses hypothetical Treasuries, which are not real either, and therefore are not tax-exempt. And even if they were honest to goodness Treasuries, Treasuries are not considered tax-exempt securities either. Despite the Examiner's assertion to the contrary in trying to make out an

obviousness case in the Final Rejection at pages 6 and 51, the Board is directed to see, e.g., Treasury regulation section 1.61-7(b)(3), which provides, in general, that interest on United States obligations issued after March 1, 1941, is fully taxable. Nor (of course) is there any tax exemption for hypothetical stuff. See "Fundamentals of Municipal Bonds," Public Securities Association, 1989, page 7:

> **THE FEDERAL TAX EXEMPTION**
>
> The principal characteristic that has traditionally set municipal securities apart from all other capital market securities is the federal tax exemption: the interest income on municipal bonds has historically been exempt from federal income tax. Evidence of the significance of this characteristic is reflected by the fact that municipal securities are often commonly referred to simply as "tax-exempt bonds."

See also "The Handbook of Fixed Income Securities," Frank J. Fabozzi, 5th Ed. (1997), page 161:

> The U.S. bond market can be divided into two major sectors; the taxable bond market and the tax-exempt bond market. The former sector includes bonds issued by the U.S. government, U.S. government agencies and sponsored enterprises, and corporations. The tax-exempt bond market is one in which the interest from bonds that are issued and sold is exempt from federal income taxation. Interest may or may not be taxable at the state and local level. The interest on U.S. Treasury securities is exempt from state and local taxes, but the distinction in classifying a bond as tax-exempt is the tax treatment at the federal income tax level.

Pursuant to the Treasury regulations and treatise views contrary to the Examiner's contention, the Examiner has not made out a *prima facie* case of obviousness concerning the tax-exempt requirement of the claim.

b. Ginsberg does not enable municipal bonds as the tax-exempt.

Ginsberg does mention "municipal bonds" at Col. 1, line 23, as one kind of fixed income securities, and does state the following at Col. 1, lines 50-55, that:

> Treasuries have characteristic properties that make them especially useful for the purposes of the present invention and, therefore, are used exclusively in the following discussions, with the fundamental tenant that the principles may be

applied to other types of fixed income securities without departing from the inventive concepts.

However, as the Examiner recognizes, "Ginsberg does not disclose taking a non-zero risk into account." See Ginsberg too at Col. 1, lines 56-60, that:

> One important attribute of treasuries, in the context of the present invention, is the minimal and uniform default risk; the issuance of U.S. government paper removes the default risk as a defining criteria in the relative pricing of treasuries in the market.

As Ginsberg does not mention how to handle "the default risk as a defining criteria," as the Examiner recognizes, Ginsberg does not provide a teaching that would enable one to make and use that which is the subject of the instant claims.

To place this in perspective, the Board can take notice of numerous municipal bond defaults such as that of Washington Public Power Supply System defaulting on $2.25 billion in bonds. As per Ginsberg and the Examiner, such risk is a "defining criteria." It is respectfully submitted that no one having any skill in the art would desire or think it obvious to try to realize a Ginsberg methodology that cannot handle things like multi-billion dollar defaults.

Municipal bonds involve default risk, and the Examiner conceded in Paragraph 47 of the first Office Action that the valuation methodology in Ginsberg "reflects a risk-free rate in as much as Ginsberg does not disclose taking a non-zero risk into account." Accordingly, Ginsberg clearly does not disclose how to apply the Ginsberg invention to bonds with non-zero default risk, in particular municipal bonds. Thus Ginsberg does not enable a method for valuing bonds that must involve default risk, e.g., municipal bond valuation.

It is respectfully submitted that Ginsberg does not provide an enabling disclosure for handling tax-exempt securities, and as apparently recognized by the Examiner. Or stated another way, the Examiner has failed to establish that the cited art would obviously enable one having ordinary skill in the art to make or use Applicant's claimed invention. Accordingly, a case of *prima facie* has not been made out and the rejection myst be reversed.

c. Summary.

In sum, Ginsberg's Treasury security is not tax-exempt, the Examiner has not shown that municipal bonds are enabled, and thus the Examiner has not made out a *prima facie* case of obviousness concerning the tax-exempt requirement of the claims in this group.

C. Incorporation by reference: A1, and further, Ginsberg, Coughlan, Official Notice, and art relied thereon are insufficient for *prima facie* obviousness because:

1. Claims 43, 45-56, 67, 96-101, 104-111, 116-117, 158, 229

The arguments set forth for Group A1 are reasserted here with equal force, as they are equally applicable here.

Ginsberg's methodology is directed to an index for a hypothetical portfolio, not property, and the Examiner has not shown how Ginsberg's index methodology could do a market-based valuation of ANY property. Ginsberg is not even close to disclosing a workable methodology tenable almost half of the requirements of each independent claim. In particular, Ginsberg teaches no part of the following two claimed method steps:

> generating the second market-based valuation reflecting computation of a current market-based yield/discount rate for the property with the second digital electrical computer and the input; and
>
> generating the second financial analysis output, including the second market-based valuation, at an output means electrically connected to said second digital electrical computer.

Furthermore, Ginsberg does not teach these method steps in the context of a claim *as a whole*, either.

The particular use of Official Notice in the Final Rejection cannot serve as a reason to modify Ginsberg to make up half of the claimed invention, because the Official Notice is premised on non-analogous art, combined with no particular reason and insufficient explanation, in a way that makes no sense and would destroy and render Ginsberg inoperable for its intended purpose, intent, and function, and even so does not account for all the claim

limitations.

The rejection of the base claim falls short of a case of *prima facie* obviousness pursuant to 35 U.S.C. Sec. 103 or the contemplation of the Supreme Court in *Graham v. John Deere Co.*, 383 U.S. 1 (1966), and therefore the rejection must be reversed. As to Coughlan in the (dependent) claims of this group, consider the remarks set forth below.

Overview of Coughlan

Coughlan is directed to financial add-ins for Lotus 1-2-3 spreadsheets. While much of the discussion is directed to health care, nursing homes, etc., the article does mention "a training module for midlevel bank people to help them quantify risk more accurately."

Examiner's Contention

The Examiner states, in the Final Rejection at pages 16, 27, and 30 that:

> Ginsberg does not expressly disclose that the step of controlling is carried out with a quantitative description of risk, but the use of quantitative descriptions of risk in financial analysis is well known, as taught by Coughlan... Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention to carry out the step of controlling with the quantitative description of risk as part of the first financial analysis output, for the obvious advantage of obtaining usable estimates of the risks in purchasing an item of property.

Applicant's Appeal Contentions

Foregoing arguments of Group A concerning Ginsberg are restated here with equal force.

a. There is no teaching of the claimed <u>valuation reflecting... a quantitative description of risk</u>.

Coughlan mentions Lotus 1-2-3 add-ins in connection with "a training module for midlevel bank people to help them quantify risk more accurately." This is not a teaching of <u>a valuation</u>. This is *a training module.* It does "simulations," according to Coughlan.

Coughlan says nothing about using this training module to do a <u>valuation reflecting...a quantitiative description of risk</u>...as required by the claims. Although Coughlan does

mention "investments," one can "quantify risk" for investments without doing a valuation, for example, in evaluating risk in insurance investments. Coughlan mentions "quantify risk," but does not teach how one would do this in connection with a valuation.

Like Coughlan, Ginsberg does not teach the claimed valuation reflecting... a quantitative description of risk either, as conceded by the Examiner in the Final Rejection at page 16. Because neither of them teach it, no combination of them can teach it. Thus, there is no *prima facie* case of obviousness.

And given the interest rate / hypothetical index and generic non-expiring bonds of Ginsberg, no system appears to be imaginable that could do the instant claimed element: market-based valuation reflecting... a quantitative description of risk in connection with property.

b. No reason to combine.

There are at least two reasons that any combination or modification of Ginsberg, in view of Coughlan, is prohibited.

One reason that the Examiner's proposed combination or modification is improper is that it is directly contradicted by the teachings. At page 12 of the final rejection and elsewhere, the Examiner explains the attempted combination or modification as follows:

> "Ginsberg does not expressly disclose that the step of controlling is carried out with a quantitative description of risk, but the use of quantitative descriptions of risk in financial analysis is well known, as taught by Coughlan (last six paragraphs in particular). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to carry out the step of controlling with the quantitative description of risk as part of the first financial analysis output, for the obvious advantage of obtaining usable estimates of the risks involved in purchasing an item of property."

The Examiner understates the facts in asserting that "Ginsberg does not expressly disclose that the step of controlling is carried out with a quantitative description of risk..." Ginsberg does more than "...not expressly disclose...a quantitative description or risk;" Ginsberg, Col. 1, lines 50-60 show that Ginsberg expressly avoids using any quantitative

description or risk in asset valuation:

> "Treasuries have characteristic properties that make them especially useful for the purposes of the present invention and, therefore, are used exclusively in the following discussions... One important attribute of treasuries, in the context of the present invention, is the minimal and uniform default risk; the issuance of U.S. government paper removes the default risk as a defining criteria in the relative pricing of treasuries in the market."

If, as the Examiner asserts, "...the use of quantitative descriptions of risk are well known,...," the addition of Coughlan does nothing to change the objective of Ginsberg to avoid quantitative descriptions of risk in its invention.

This brings up an important distinction that the Examiner ignores: the Examiner's assertion that "the use of quantitative descriptions of risk in financial analysis" is not the same as asserting that the use of quantitative descriptions of risk in doing valuations is well known. Indeed, the common use of quantitative measures of risk in financial analysis is in computing reasonably possible changes in asset valuations from pre-specified values over specified time intervals, not in computing the valuations themselves.

In such analyses, the asset valuations are not computed as outputs; they are available from other sources as inputs. For example, in the case of the banking application discussed in the last six paragraphs of Coughlan and cited by the Examiner, such valuations are typically cash balances or the principal values of outstanding bank loans. In such cases, the asset valuation inputs are obvious and unequivocal, and use of a system such as Applicant's instant claimed invention to compute the valuation is neither necessary nor appropriate.

That this is the extent of Coughlan's intended teaching is indicated by the following disclosure from the last six paragraphs of Coughlan, as cited by the Examiner:

> "...a training module for midlevel bank people to help them *quantify risk more accurately*... The tool aids in risk analysis and performs simulations. ... It could be used by anyone making risk decisions. ... A typical training

session...lasts three hours."

This shows that *quantified risk is an output of the Coughlan system.* This is completely different from the instant claim, in which quantified risk is an input.

This also shows that *the teaching of Coughlan in the Examiner's cited paragraphs is limited to the objective of quantifying risk*; it does not extend in any obvious way to using the quantified risk output in a further computation to quantify valuations.

The Examiner also misconstrues the step of controlling in the instant claim in asserting that the step could be "for the obvious advantage of obtaining usable estimates of the risks involved in purchasing an item of property." The claimed step is to obtain a valuation of the property. The quantitative description of risk in the instant claim is one input in the step of controlling, not an output as suggested by the Examiner; rather, the claimed first valuation is one output. In fact, the Examiner's rejection reduces to the assertion that there is an obvious advantage to adding this input to Ginsberg in order to obtain the input as part of the output. This is semantic sophistry rather than the proper reason that is required to combine cited art by *In re Gordon.*

Because Ginsberg and Coughlan contradict the Examiner's proposed combination, there has been no showing of a *prima facie* case of obviousness, and the rejection must be reversed.

A second reason that it is improper to make the Examiner's proposed combination is that the proposed combination would destroy the intended function of the cited art. For example, it is unfathomable that the S&P index would utilize any numerical indication of how risky the index is, as for example, "...the S&P was up 137 points today in active trading, but the S&P reflects 20% risk..." based on Lotus 1-2-3 add-ins in a training module for midlevel bank people. Similarly, it is unfathomable that the Dow would do so with its index. It is equally unfathomable that a bond / interest rate index, like Ginsberg, would do the same. The Examiner's proposed

reason is simply not credible.

Problems with the Examiner's proposed combination / modification have already been pointed out above with regard to the other cited art, and adding another citation does not mitigate the previously mentioned problems.

It is implausible that the S&P would utilize any numerical indication of how risky the index is, as for example, "...the S&P was up 137 points today in active trading, but the S&P reflects 20% risk..." based on Lotus 1-2-3 add-ins in a training module for midlevel bank people. Similarly, it is implausible that the Dow would do so with its index. It is equally implausible that a bond / interest rate index, like Ginsberg, would do the same. The Examiner's proposed reason is not credible.

Indeed, there is no risk indication in connection with an index, like the S&P. Indexes such as the S&P are only snapshots markets. It would be difficult to imagine a better way to destroy an index than to somehow use a quantitative description of risk to blur the present market snapshot with future uncertainty. If ever there were a case where the proposed combination would destroy the intent, purpose, and function of the cited art, this is it. The combination and modification proposed by the Examiner is extraneous to, and would completely undermine the value of, any "barometer of the market."

The Examiner attempts to explain that it would have made sense to one having ordinary skill in the art for the index data to have reflected the risk for "obtaining usable estimates of the risks in purchasing an item of property." But again, in the first financial analysis output of Ginsberg, neither an interest-rate index nor a "hypothetical portfolio" of generic securities is property.

Coughlan's mention of "quantify risk" is in connection with a training module—which has nothing to do with an index--nothing. Ginsberg's hypothetical portfolio has nothing to do with training midlevel bank people—nothing. Coughlan's "training module for midlevel bank

people" has nothing to do with Ginsberg or with the claimed invention, and the proposed combination would destroy the respective intent, purpose, and functions of each, e.g., to form a risky index for training midlevel bank people. Furthermore, the Examiner has not explained how a valuation could be carried out with a quantitative description of risk without contradicting Ginsberg's purpose of a providing a snapshot of a bond market.

Note too that Coughlan states that the Lotus 1-2-3 add-ins "could be used by anyone making risk decisions." However, outputting index data (Ginsberg) is not a risk *decision.* There is no decision in outputting index data, and thus there is no context for a risk in the first financial analysis output of Ginsberg. There is no plausible reason to combine offered by the Examiner so that the first financial analysis (index output data) would include a valuation reflecting... a quantitative description of risk for property. Even if one could find some way to combine them, together they do not teach the claimed: valuation reflecting... a quantitative description of risk especially in connection with property. Accordingly, there has been no showing of a *prima facie* case of obviousness.

2. As to claims 96-101, 104-111, 116-117, there is no teaching of a second member of the group.

a. No reason to combine.

The Examiner concedes that Ginsberg does not teach a second member of the group at page 30 of the Final Rejection. The Examiner there contends that because a valuation reflective of a quantitative description of risk is shown by Coughlan, it would have been obvious to combine them "for the obvious advantage of obtaining usable estimates of the risks involved in purchasing an item of property." (See Final Rejection at page 30, lines 13-14.)

But again Ginsberg's hypothetical portfolio is not property, and no one is purchasing the hypothetical portfolio, so the Examiner's reason to combine has the same gaping hole as the rest of the rejection for all claims. But further, what is Ginsberg's index

output? Is it a "real time barometer of the fixed-income market" as Ginsberg teaches, or is it an estimate of the risks involved in purchasing an item of property, as the Examiner contends. These are mutually exclusive in the context of Ginsberg. A barometer is directed to the present and "risks in purchasing" is in the future. Thus, a valuation of the hypothetical portfolio for Ginsberg's interest-rate index cannot reflect the two members of the group.

In sum, the Examiner's proposed reason to combine is not credible and therefore fails in attempting to make out a *prima facie* rejection; the rejection must be reversed.

3. As to claims 97, 99, 101, 105, 107, 109, 111, and 117

The Examiner contends, for example in the Final Rejection at page 30, that "Ginsberg discloses by implication that the valuation reflects a risk-free rate, in as much as Ginsberg does not disclose taking a non-zero risk into account."

First, Ginsberg's not disclosing how to take a non-zero risk into account does not disclose how to take a risk-free rate into account.

Second, the Examiner has misconstrued the meaning of risk free rate. The Examiner has equated Ginsberg's interest rates on default-free generic bonds with Applicant's claimed risk free rate. This is not the correct meaning of the claim requirement, and the Board is requested to take notice of the plain and ordinary meanings of risk-free rate and risk-free asset, as indicated for example in Investments, by William Sharpe, Gordon Alexander and Jeffrey Bailey, Fifth Edition, 1995. A copy of Chapter 9 of Investments is enclosed. As can there be seen, the meanings of the terms "risk-free rate" and "risk-free asset" arise within the context of a one-period investment model. The investment period length is a predetermined time interval. Asset prices at the beginning of the investment period are assumed to be known by investors, and investors are assumed to have expectations about investment returns from all assets at the beginning of the investment period. In particular, every investor is assumed to associate an expected return with each asset.

The models identify investment risk mathematically with investor uncertainty at the beginning of the period about investment outcomes. Nearly all assets are risky in this sense, because actual returns that will be generated by assets during the period are usually not known by investors at the beginning of the period. Accordingly, the actual returns usually will not turn out to be the returns expected by investors at the beginning of the period. These assets are known as risky assets.

In this context, a risk-free asset is an exceptional kind of asset: one for which the actual return is known by investors with certainty at the beginning of the investment period. Because one-period models equate uncertainty about outcomes with investment risk, absence of uncertainty corresponds to absence of investment risk: hence, the expression "risk-free asset."

A risk-free rate is the expected return associated with a risk-free asset. It is well known from investment theory that there can be at most one risk-free rate associated with a given investment holding period.

For example, in the enclosed Chapter 9 of Investments, by William Sharpe, Gordon Alexander and Jeffrey Bailey, Fifth Edition, 1995, there is a discussion of risk-free asset and risk-free rate, and from p. 233 of Chapter 9:

Because a risk-free asset has by definition a certain return, this type of asset must be some kind of fixed-income security with no possibility of default. As all corporate securities in principle have some chance of default, the risk-free asset cannot be issued by a corporation. Instead it must be a security issued by the federal government. However, not just any security issued by the U.S. Treasury qualifies as a risk-free security.

This leaves only one type of Treasury security to qualify as a risk-free asset: a Treasury security with a maturity that matches the length of the investor's (expected) holding period. For example, (if the length of the investment period) is three months, investors ... would

find that a Treasury bill with a three-month maturity date had a certain return.

Sharpe et al. also teaches on pp. 245-248 that a risk-free rate is the expected return associated with a risk-free asset.

The Examiner asserts erroneously that all Treasury securities are risk-free. However, Sharpe et al. further teaches that "risk-free" does not simply equate with default-free: among other things, it encompasses that the maturity of the security equals the expected length of the investment period.

Absence of investment uncertainty also implies no uncertainty due to returns on future reinvestment of coupons. It follows that a risk-free asset is a Treasury bill or a Treasury strip, i.e., a zero-coupon fixed-income asset as indicated in Applicant's invention disclosure.

Therefore, the Examiner has erroniously equated risk-free rate with Ginsberg's interest rates on default-free generic bonds, which is not the meaning of the claimed requirement, as would be understood by those having ordinary skill in the art.

In sum, the Examiner has failed to show that Ginsberg teaches the claimed risk-free rate and therefore fails in attempting to make out a *prima facie* rejection; the rejection must be reversed.

4. As to claims 98-101

a. Incorporate by reference C1, and not enabling for corporate debt.

Ginsberg does mention "corporate bonds" at Col. 1, line 23, as one kind of fixed income securities, and does state the following at Col. 1, lines 50-55, that:

> Treasuries have characteristic properties that make them especially useful for the purposes of the present invention and, therefore, are used exclusively in the following discussions, with the fundamental tenant that the principles may be applied to other types of fixed income securities without departing from the inventive concepts.

However, as the Examiner recognizes, "Ginsberg does not disclose taking a non-

zero risk into account." See Ginsberg too at Col. 1, lines 56-60, that:

> One important attribute of treasuries, in the context of the present invention, is the minimal and uniform default risk; the issuance of U.S. government paper removes the default risk as a defining criteria in the relative pricing of treasuries in the market.

As Ginsberg does not mention how to handle "the default risk as a defining criteria," as the Examiner recognizes, Ginsberg does not provide a teaching that would enable one to make and use that which is the subject of the instant claims.

To place this in perspective, the Board can take notice of numerous corporate bond defaults such as that of Enron last year, which amounted to $9.9 billion (excluding bank credits and derivatives, of course). As per Ginsberg and the Examiner, such risk is a "defining criteria." It is respectfully submitted that no one having any skill in the art would desire or think it obvious to try to realize a Ginsberg methodology that cannot handle things like multi-billion dollar defaults.

Corporate debt involves default risk, and the Examiner conceded in Paragraph 47 of the first Office Action that the valuation methodology in Ginsberg "reflects a risk-free rate in as much as Ginsberg does not disclose taking a non-zero risk into account." Accordingly, Ginsberg clearly does not disclose how to apply the Ginsberg invention to bonds with non-zero default risk, in particular corporate debt. Thus Ginsberg does not enable a method for valuing bonds that must involve default risk, e.g., corporate debt valuation.

It is respectfully submitted that Ginsberg does not provide an enabling disclosure for handling tax-exempt securities, and as apparently recognized by the Examiner. Or stated another way, the Examiner has failed to establish that the cited art would obviously enable one having ordinary skill in the art to make or use Applicant's claimed invention. Accordingly, a case of *prima facie* has not been made out and the rejection myst be reversed.

5. As to claims 104-105

a. Incorporate by reference C1, and there is no reason to combine to reach the claimed real estate.

The Examiner appears to believe that Applicant's method ... having a system determined purchase price for property in consummating a sale in connection with a valuation of ... real estate is obvious in view of a "training module for midlevel bank people" and a hypothetical portfolio for an interest rate index, in view of the prior existence of real estate.

Neither Coughlan nor Ginsberg mention real estate or any method or means for performing a valuation of real estate nor any method ... having a system determined purchase price therefor. Nor is it easy to imagine how these teachings could handle a valuation of real estate as they seem to have nothing whatsoever to do with a valuation of real estate.

At page 31 of the Final Rejection, the claims are rejected because the Examiner contends that "real estate is well known." However, that alone is no evidence that any method for performing a valuation of real estate was also known. In rejecting the claims of this group, the Examiner has not cited any teaching of any method for performing a valuation of real estate. *Per se* this is not a *prima facie* case of obviousness.

The Examiner's reasoning is as follows.

> Real estate, like the Treasury notes of Ginsberg's patent, can be bought, sold, rented, etc. Hence it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to apply Ginsberg's method of valuing securities to real estate, for the obvious advantage of determining at what prices it would be profitable to buy or sell real estate.

See Final Rejection at page 31.

There is no motivation for this modification or suggestion whatsoever in the cited art, and as to the cited art for this group, the only suggestion of any method for performing a valuation of real estate as the property can be found in Applicant's claims. This kind of rejection is prohibited by *In re Lee; In re Rouffet; and In re Kotzab.*

Further, the Examiner has not shown how this modification plausibly could work

(the invention can't be obvious based on an approach that does not work).

First, no one would value real estate in the manner of Ginsberg or like a Treasury. For example, the Ginsberg methodology computes a discount or premium from par and a true yield to maturity (Col. 3, lines 59-61), but trying to apply these to real estate is ludicrous. These have nothing to do with real estate.

Second, Ginsberg's index valuation is based on real time trading, and a real time index for real estate does not seem to be doable, at least because real estate is not fungible (e.g., reflecting the uniqueness of real estate is the common phrase that the 3 main sources for real estate value are "location, location, location"). Accordingly, trading in unique things is very different from trading options or futures on stock or sugar, etc.

Third, for trading at a financial exchange (as Ginsberg teaches), by law, one would need to register the Examiner's apparently implied real estate with either the SEC or CFTC. However, registering real estate has not been shown to be doable under the law.

Fourth, even assuming that one can find a way to make real estate fungible for trading, and obtain SEC and CFTC registrations for trading options or futures on the real estate, the Examiner still must overcome the fact that Ginsberg's methodology applies to an interest-rate index and a hypothetical portfolio, not the claimed property of any sort, including real estate. The Examiner has proposed no idea of how Ginsberg could handle honest to goodness property in the place of his portfolio, which has not been shown and is clearly contrary to Ginsberg's teachings. If the Examiner can sidestep Ginsberg's intentional use of "hypothetical" and "generic" without contradicting Ginsberg's explicit teachings to the contrary, so as to handle honest to goodness property, then the Examiner must come up with some workable, reality-based system, and the Examiner has not explained how such a system could work. That is, the Examiner must explain plausibly how his purported obvious modification of Ginsberg's interest-rate index and hypothetical portfolio might have some workable

embodiment in reality.

For example, the Examiner's apparently proposed reality-based real estate index valuation would be some sort of real time barometer of the real estate market, and the system inputs apparently would be analogous to Ginsberg's bids, asks, and trades, but for real time trading of real estate rather than for Treasury bills and notes. However, no such trading system has been shown to exist for real estate to provide such inputs into the methodology of Ginsberg—nor has the Examiner proposed how it could exist or even proposed any reason for it to exist. Indeed much of the information about real estate is not even publicly accessible, let alone accessible in Ginsberg's real time. The Examiner has made no showing of any real time trading of real estate (or even a reason for such a market) or how an embodiment could work so as to provide the input to Ginsberg's index valuation system.

Next, the Examiner has made no showing of how the Ginsberg output could work. Pursuant to Ginsberg, presumably a basket (Ginsberg) of real estate would be used to support construction of a real estate index and trading of options and futures on the index through financial exchanges (Ginsberg). But financial exchanges do not handle futures trading in real estate, as discussed above, and even assuming that the notion of an option or a future in real estate were to have some meaning (and even this has not been shown), trading in them would be illegal without SEC or CFTC registration.

Whatever could come from what the Examiner contends is obvious is essentially unimaginable in reality. The unimaginable is not obvious. Ginsberg has essentially nothing to do with forming a valuation of real estate, and there is no possible reason to combine the cited teachings into anything meaningful, which the Examiner is required to do and has not done. Accordingly, there has been no showing of *prima facie* obviousness, and the rejection must be reversed.

6. As to claims 106-107

a. Incorporate by reference C1, and there is no disclosure of the claimed not including securities.

The Examiner appears to believe that Applicant's method ... having a system determined purchase price for ...property not including securities is obvious in view of a "training module for midlevel bank people" and a hypothetical portfolio for an interest rate index, in view of the prior existence of property not including any securities.

Neither Coughlan nor Ginsberg mention property not including securities nor any method, means, or idea in connection with performing a valuation of property not including securities nor any method ... having a system determined purchase price therefor. Neither is it easy to imagine how these teachings could handle a valuation of property not including securities as they seem to have nothing whatsoever to do with a valuation of property not including securities nor any sort of property whatsoever.

For example, does Ginsberg or Coughlan mention a system determined purchase price for tangible personal property as the ...property not including securities? No, because as the Examiner points out in his reasons for allowability at pages 47-48:

> [N]either Ginsberg nor any other prior art of record discloses, teaches, or reasonably suggests generating the valuation for tangible personal property as the property, nor could this be easily combined with the method taught by Ginsberg, since, for example, the Ginsberg methodology computes a discount or premium from par and a true yield to maturity, which are inapplicable to cars, furniture, or other tangible personal property. Tangible personal property can be leased, and it would be possible to temporally decompose leased tangible personal property into an equity asset and a portfolio of debt instruments, by analogy to what Graff ("The Impact of Tax Issues on Real Estate Debt and Equity Separation") teaches doing for real estate; however, the mere potential of doing this does not make it obvious to do.

So if broad classes of property not including securities are not obvious over the cited art, why should any other kinds of property not including securities be obvious? The Examiner has made no attempt to explain his inconsistent arguments. All that can be understood is that the Examiner relies solely on the prior existence of property not including

securities for some claims but not for others. See page 31 of the Final Rejection. However, the prior existence of anything does not teach a particular method for valuing it, especially with a system determined purchase price.

In rejecting the claims of this group, the Examiner has not cited any teaching of any method for performing a valuation of property not including securities. *Per se* this is not a *prima facie* case of obviousness.

The Examiner's reasoning is as follows.

> Property not including securities, like the Treasury notes of Ginsberg's patent, can be bought, sold, rented, etc. (Real estate, cars, and furniture, for example, are fairly often rented and sold outright). Hence it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to apply Ginsberg's method of valuing securities to property not including securities, for the obvious advantage of determining at what prices it would be profitable to buy or sell property not including securities.

See Final Rejection at pages 31-32.

There is no motivation for this modification or suggestion whatsoever in the cited art, and as to the cited art for this group, the only suggestion of any method for performing a valuation of property not including securities can be found in Applicant's claims. This kind of rejection is prohibited by *In re Lee; In re Rouffet; and In re Kotzab.*

Applicant requests the Board to contrast the above-quoted rejection rationale with the above-quoted reasons for allowance to appreciate the inconsistent reasoning in rejecting the instant claims.

Further, the Examiner has not shown how this modification plausibly could work (the invention can't be obvious based on an approach that does not work). First, no one would value property not including securities such as the Examiner's "real estate, cars, and furniture" in the manner of Ginsberg or like a Treasury note. For example, the Ginsberg methodology computes a discount or premium from par and a true yield to maturity (Col. 3, lines 59-61), but trying to apply these to property not including securities such as the Examiner's "real estate,

cars, and furniture is ludicrous. See section C4 regarding real estate.

Second, Ginsberg's index valuation is based on real time trading, and a real time index for property not including securities such as the Examiner's "real estate, cars, and furniture" does not seem to be doable, not the least because property not including securities such as the Examiner's "real estate, cars, and furniture" is not necessarily fungible (e.g., reflecting the uniqueness of real estate is the common phrase that the 3 main sources for real estate value are "location, location, location"). Accordingly, trading in unique things is very different from trading options or futures on stock or sugar, etc.

Third, for trading at a financial exchange (as Ginsberg teaches), by law, one would need to register the Examiner's apparently implied property not including securities such as the Examiner's "real estate, cars, and furniture" with either the SEC or CFTC. However, registering such things has not been shown to be doable under the law.

Fourth, even assuming that one can find a way to make property not including securities such as the Examiner's "real estate, cars, and furniture" fungible for trading, and obtain SEC and CFTC registrations for trading options or futures on the real estate, the Examiner still must overcome the fact that Ginsberg's methodology applies to an interest-rate index and a hypothetical portfolio, not the claimed property of any sort, including property not including securities such as the Examiner's "real estate, cars, and furniture". The Examiner has proposed no idea of how Ginsberg could handle honest to goodness property in the place of his portfolio, which has not been shown and is clearly contrary to Ginsberg's teachings. If the Examiner can sidestep Ginsberg's intentional use of "hypothetical" and "generic" without contradicting Ginsberg's explicit teachings to the contrary, so as to handle honest to goodness property, then the Examiner must come up with some workable, reality-based system, and the Examiner has not explained how such a system could work. That is, the Examiner must explain plausibly how his purported obvious modification of Ginsberg's interest-rate index and

hypothetical portfolio might have some workable embodiment in reality.

For example, the Examiner's apparently proposed reality-based property not including securities such as the Examiner's "real estate, cars, and furniture" index valuation would be some sort of real time snapshot of the market for property not including securities such as the Examiner's "real estate, cars, and furniture" market, and the system inputs apparently would be analogous to Ginsberg's bids, asks, and trades but for real time trading of property not including securities such as the Examiner's "real estate, cars, and furniture", rather than for Treasury bills and notes. However, no such trading system has been shown to exist for property not including securities such as the Examiner's "real estate, cars, and furniture" to provide such inputs into the methodology of Ginsberg—nor has the Examiner proposed how it could exist or even proposed any reason for it to exist. Indeed, as of Applicant's priority date in 1992, much of the information about such things as furniture has not been shown to have been publicly accessible in Ginsberg's real time. The Examiner has made no showing of any real time trading of property not including securities such as the Examiner's "real estate, cars, and furniture" (or even a reason for such a market) or how an embodiment could work so as to provide the input to Ginsberg's index valuation system.

Next, the Examiner has made no showing of how the Ginsberg output could work in a market based on property not including securities. Pursuant to Ginsberg, presumably a basket (Ginsberg) of property not including securities such as the Examiner's "real estate, cars, and furniture" would be used to support construction of a corresponding index and trading of options and futures on the index through financial exchanges (Ginsberg). But financial exchanges do not handle futures trading in property not including securities such as the Examiner's "real estate, cars, and furniture", as discussed above, and even assuming that the notion of an option or a future in property not including securities such as the Examiner's "real estate, cars, and furniture" were to have some meaning (and even this has not been shown),

trading in them would be illegal without SEC or CFTC registration.

Whatever could come from what the Examiner contends is obvious is essentially unimaginable in reality. The unimaginable is not obvious. Ginsberg has essentially nothing to do with forming a valuation of property not including securities such as the Examiner's "real estate, cars, and furniture", and there is no possible reason to combine the cited teachings into anything meaningful, which the Examiner is required to do and has not done. Accordingly, there has been no showing of *prima facie* obviousness, and the rejection must be reversed.

7. As to claims 110-111

a. Incorporate by reference C1, and Ginsberg's Treasury security is not tax-exempt.

As stated above, Ginsberg is directed to a hypothetical portfolio of "generic" securities, and this is not considered tax-exempt because it is not even property. The hypothetical portfolio uses hypothetical Treasuries, which are not real either, and therefore are not tax-exempt. And even if they were honest to goodness Treasuries, Treasuries are not considered tax-exempt securities either. Despite the Examiner's assertion to the contrary in trying to make out an obviousness case in the Final Rejection at pages 6 and 51, the Board is directed to see, e.g., Treasury regulation section 1.61-7(b)(3), which provides, in general, that interest on United States obligations issued after March 1, 1941, is fully taxable. Nor (of course) is there any tax exemption for hypothetical stuff. See "Fundamentals of Municipal Bonds," Public Securities Association, 1989, page 7:

> **THE FEDERAL TAX EXEMPTION**
>
> The principal characteristic that has traditionally set municipal securities apart from all other capital market securities is the federal tax exemption: the interest income on municipal bonds has historically been exempt from federal income tax. Evidence of the significance of this characteristic is reflected by the fact that municipal securities are often commonly referred to simply as "tax-exempt bonds."

See also "The Handbook of Fixed Income Securities," Frank J. Fabozzi, 5th Ed. (1997), page

161:

> The U.S. bond market can be divided into two major sectors; the taxable bond market and the tax-exempt bond market. The former sector includes bonds issued by the U.S. government, U.S. government agencies and sponsored enterprises, and corporations. The tax exempt bond market is one in which the interest from bonds that are issued and sold is exempt from federal income taxation. Interest may or may not be taxable at the state and local level. The interest on U.S. Treasury securities is exempt from state and local taxes, but the distinction in classifying a bond as tax-exempt is the tax treatment at the federal income tax level.

Pursuant to the Treasury regulations and treatise views contrary to the Examiner's contention, the Examiner has not made out a *prima facie* case of obviousness concerning the tax-exempt requirement of the claim.

D. Incorporation by reference: A1, and further, Ginsberg, Epstein, Official Notice, and art relied thereon are insufficient for *prima facie* obviousness because:

1. As to Claims 15, 17-28, 65, and 227

The arguments set forth for Group A1 are reasserted here with equal force, as they are equally applicable here.

Ginsberg's methodology is directed to an index for a hypothetical portfolio of generic securities, not property, and the Examiner has not shown how Ginsberg's interest rate / hypothetical index methodology could do a market-based valuation of property. Ginsberg is not even close to disclosing a workable methodology for almost half of each independent claim. In particular, Ginsberg teaches no part of the following two claimed method steps:

> generating the second market-based valuation reflecting computation of a current market-based yield/discount rate for the property with the second digital electrical computer and the input; and
>
> generating the second financial analysis output, including the second market-based valuation, at an output means electrically connected to said second digital electrical computer.

Of course, Ginsberg does not teach these method steps in the context of a claim *as a whole*, either.

The particular use of Official Notice in the Final Rejection cannot serve as a reason to modify Ginsberg to make up half of the claimed invention because the Official Notice is premised on non-analogous art, combined with no particular reason and insufficient explanation, in a way that makes no sense and would destroy and render Ginsberg inoperable for its intended purpose, intent, and function, and even so does not account for all the claim limitations.

The rejection of the base claim falls short of a case of *prima facie* obviousness pursuant to 35 U.S.C. Sec. 103 or the contemplation of the Supreme Court in *Graham v. John Deere Co.*, 383 U.S. 1 (1966), and therefore the rejection must be reversed. Turning more particularly to the claims in this group, please consider the following.

Overview of Epstein

Epstein is the memoir of a conference attendee, e.g., " I arrived early for the mortgage conference and was enjoying the early morning sun and balmy weather....tonight we're scheduled for Lamaze class." An abstract at page 1 of Epstein notes the conference focus on duration: "Duration, the time it takes to recapture the purchase price from expected cash flows...provides a more sophisticated measure of interest rate risk than the relationship between yield and maturity...." In discussing how lower coupons for bonds means higher price volatility, at page 2, Epstein states:

> These text-book examples are just for illustration; actually choosing an investment based on duration should be part of a strategic program, an exercise in targeting portfolio needs, achieving an *expected return* under expected market *scenarios* or matching your risk tolerance."

Examiner's Position

The Examiner states the following in the Final Rejection at page 11:

> Ginsberg does not expressly disclose that the step of controlling is carried out with the expected return under a performance scenario as part of the financial output. However, it is well known to use expected return under a performance scenario as part of financial analysis, as taught by Epstein (whole article, and in particular the

section "Lower Coupons Mean Higher Price Volatility"). Hence it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to carry out the step of controlling with the expected return under a performance scenario as part of the first financial analysis output, for the obvious advantage of obtaining estimates of what return could plausibly be expected.

Applicant's Positions

a. Rejection is Premised on a Misconstrued Claim.

The Examiner misstates the claim and thus fails to consider all limitations of the claim. The claim is not for an "expected return under a performance scenario as part of financial analysis," as the Examiner contends in the Final Rejection at pages 15-16. See also, Final Rejection at page 50. The claim requires generating *a market-based valuation* for the property... *reflecting...expected return under a performance scenario....* and it is the market-based valuation that is part of the financial analysis output. Epstein does not teach or enable generating a market-based valuation for the property... reflecting...expected return under a performance scenario.... By misstating the claim, by not considering all claim limitations, and with no teaching of the correctly construed claim element, there is no *prima facie* case of obviousness. The rejection must be reversed.

b. There is no teaching of a performance scenario.

Epstein does not even mention a performance scenario. Epstein here is talking about targeting portfolio needs, in part, by selecting a diversity of bonds: i.e., if the bonds are sufficiently diversified, then they mimic the market under all market scenarios and risk tolerances. This is not the same as using a performance scenario in generating a market-based valuation for a particular property. Thus, in not even mentioning a performance scenario, Epstein does not teach suggest, or enable one to do the claimed generating a market-based valuation for the property... reflecting...expected return under a performance scenario.... With no teaching of the correctly construed claim element, and no enabling disclosure of the claim element, there is no *prima facie* case of obviousness.

c. There is no reason to combine.

Problems with the Examiner's proposed combination / modification have already been pointed out above with regard to the other cited art, and adding another citation does not mitigate the previously mentioned problems.

Further, first, using a performance scenario or Epstein to determine the expected return on a barometer of the market (Ginsberg) is not a meaningful concept. The barometer, like the S&P 500, is just a snapshot of the market. So the Examiner's proposed explanation for combining Ginsberg with Epstein does not make any sense, especially in trying to reach Applicant's invention as a whole. The cited art contains no plausible motivation or suggestion to modify or combine the cited art to reach the Applicant's claimed invention, and with no plausible reason to combine Ginsberg and Epstein, there is no *prima facie* case of obviousness. See *In re Lee; In re Rouffet; and In re Kotzab.*

Second, there is no possibility for a market-based valuation... reflecting ... a performance scenario in Ginsberg because there is no scenario—it is just a barometer of the market. So trying to stick Epstein into Ginsberg for generating a market-based valuation for the property... reflecting...expected return under a performance scenario.... would defeat the intent, purpose and function of Ginsberg (assuming Epstein actually did what the Examiner contends—corrected for his misstatement of the claim). With no plausible reason to combine or modify these teachings, there is no *prima facie* case of obviousness. See again *In re Lee; In re Rouffet; and In re Kotzab.*

Third, setting aside that an index is not property, it would make no sense for the S&P 500 to output its index having a market-based ... reflecting...expected return under a performance scenario.... because the index is a snapshot of the market, not some scenario; the same is true for the Dow index, and the same is true for Ginsberg. . With no plausible reason to combine or modify these teachings, there is no *prima facie* case of obviousness. See *In re*

Gordon; U.S. v. Adams; In re Hedges; and In re Fine.

Fourth, in order to have an expected rate of return, there must be some scenario under which there could be a return, which as mentioned above, would never occur with Ginsberg's first market-based valuation of his index. There is no scenario with an index, like the S&P, Dow, or Ginsberg; especially not Ginsberg which is a hypothetical portfolio of generic securities. Each is intended to be a snapshot of the market, not investment advice; thus none combine the index output with an expected rate of return. This mitigates against the Examiner's proposed combination and modification of Ginsberg vis-à-vis Epstein. With no plausible reason to combine or modify these teachings to achieve what the Examiner proposes, there is no *prima facie* case of obviousness. See *In re Clinton.*

Fifth, at page 50, lines 14-16, the Examiner refers to the statement from Page 7, lines 13-14 of his previous communication in asserting that "motivation is supplied" for combining the teachings of Epstein and Ginsberg. However, that quote is a vague "for the obvious advantage of obtaining estimates of what return could plausibly be expected." An uncountably infinite number of different possible returns could plausibly be expected, and the Examiner has not justified his assertion that a single "the obvious advantage" can *a priori* be assumed to apply to all of them. In the absence of such justification, the Examiner's assertion that motivation is supplied for combining Epstein and Ginsberg is untenable.

Because the Examiner has not considered all claim limitations, relies on a teaching that does not disclose the claim element, and offers no plausible reason to explain why anyone would have associated these respective teachings to reach *the invention as a whole*, the Examiner has not made out a case of *prima facie* obviousness. The rejection must be reversed.

2. As to claims 17 and 23

a. Incorporate by reference A1, and Ginsberg is not enabling for corporate debt.

Ginsberg does mention "corporate bonds" at Col. 1, line 23, as one class of fixed

income securities, and does state the following at Col. 1, lines 50-55, that:

> Treasuries have characteristic properties that make them especially useful for the purposes of the present invention and, therefore, are used exclusively in the following discussions, with the fundamental tenant that the principles may be applied to other types of fixed income securities without departing from the inventive concepts.

However, as the Examiner recognizes, "Ginsberg does not disclose taking a non-zero risk into account." See Ginsberg too at Col. 1, lines 56-60, that:

> One important attribute of treasuries, in the context of the present invention, is the minimal and uniform default risk; the issuance of U.S. government paper removes the default risk as a defining criteria in the relative pricing of treasuries in the market.

As Ginsberg does not mention how to handle "the default risk as a defining criteria," as the Examiner recognizes, Ginsberg does not provide a teaching that would enable one to make and use that which is the subject of the instant claims.

To place this in perspective, the Board can take notice of numerous corporate bond defaults such as that of Enron last year, which amounted to $9.9 billion (excluding bank credits and derivatives, of course). As per Ginsberg and the Examiner, such risk is a "defining criteria." It is respectfully submitted that no one having any skill in the art would desire or think it obvious to try to realize a Ginsberg methodology that cannot handle things like multi-billion dollar defaults.

Corporate debt involves default risk, and the Examiner conceded in Paragraph 47 of the first Office Action that the valuation methodology in Ginsberg "reflects a risk-free rate in as much as Ginsberg does not disclose taking a non-zero risk into account." Accordingly, Ginsberg clearly does not disclose how to apply the Ginsberg invention to bonds with non-zero default risk, in particular, corporate debt. Thus Ginsberg does not enable a method for valuing bonds that must involve default risk, e.g., corporate debt valuation.

It is respectfully submitted that Ginsberg does not provide an enabling disclosure for handling tax-exempt securities (which also involve default risk) and as apparently recognized by the Examiner. Or stated another way, the Examiner has failed to establish that the cited art would obviously enable one having ordinary skill in the art to make or use Applicant's claimed invention. Accordingly, a case of *prima facie* has not been made out and the rejection must be reversed.

3. As to claim 65:

a. Incorporate by reference D1, and further there is no disclosure of system-determined purchase price of the property.

There is no disclosure of a system determined purchase price in consummating a sale for the claimed property, which is not shown by Ginsberg. First, the only sales related to Ginsberg's index system output are of options and futures (see Fig. 6, which illustrates the Options Exchange and the Futures Exchange, and related discussion). Ginsberg's index system does not carry out the operations of the Exchanges. However, the sales of options and futures are not the same subject as the subject matter of Ginsberg's valuation of the hypothetical portfolio of generic bonds for his index (setting aside for the moment that this is not property). The claims of this group require that the price and valuation are directed to the same property.

Second, although Ginsberg does compute a "price" for his hypothetical portfolio, no one is consummating a sale of the hypothetical portfolio. Indeed, such a sale is impossible, because something hypothetical is not property, as discussed above. The hypothetical portfolio of (nonexistent) generic securities is used in supporting futures and options trading that can involve his baskets, and separately, Ginsberg finds the least expensive portfolio that conforms to delivery requirements to close out a futures contract. No one is consummating a sale of the hypothetical portfolio.

Third, in the Final Rejection at page 51, line 13-page 52, line 4: the Examiner

argues that "Ginsberg discloses his system determining a purchase price (col. 9, lines 45-59, presumably in particular line 47), and then using that purchase price in consummating sales (col. 9, line 60 through col. 10, line 7)." However, the "price" in Column 9, line 47 of Ginsberg does not include the adjective "purchase" or "sale" because it is not a transaction price, but rather is an index valuation of a hypothetical portfolio of generic securities based on previous transactions (in fact, the words "purchase" and "sale" never appear in Col. 9, lines 45-59). The price/index valuation derived by Ginsberg is then used by "index traders, investors, pension fund managers, and other participants (to) make determinations of market valuations of the duration sized portfolio. In so doing, bid, offer and execution decisions are implemented instantaneously by traders. These decisions are enacted through computer terminals.." (col. 9, lines 61-65). But Ginsberg does not disclose a system-determined purchase price of the property, system-determined bid valuations, system-determined ask valuations, or system-determined transaction valuations, because the Ginsberg invention was not designed for this purpose.

In sum, Ginsberg does not teach a system determined purchase price in consummating a sale of the same property as required in the method steps. Accordingly, a *prima facie* case of obviousness has not been shown.

E. Incorporation by reference: A1, and further, Ginsberg, Graff, Official Notice, and art relied thereon are insufficient for *prima facie* obviousness because:

1. As to Claims 2, 30, 118-177

The arguments set forth for Group A1 are reasserted here with equal force, as they are equally applicable here.

Ginsberg's methodology is directed to an index for a hypothetical portfolio, not property, etc. Ginsberg teaches no part of the following two claimed method steps:

generating the second market-based valuation reflecting computation of

a current market-based yield/discount rate for the property with the second digital electrical computer and the input; and

generating the second financial analysis output, including the second market-based valuation, at an output means electrically connected to said second digital electrical computer.

Of course, Ginsberg does not teach these method steps in the context of a claim *as a whole*, either.

The particular use of Official Notice in the Final Rejection cannot serve as a reason to modify Ginsberg to make up half of the claimed invention because the Official Notice is premised on non-analogous art, combined with no particular reason and insufficient explanation, in a way that makes no sense and would destroy and render Ginsberg inoperable for its intended purpose, intent, and function, and even so does not account for all the claim limitations.

The rejection falls short of a case of *prima facie* obviousness pursuant to 35 U.S.C. Sec. 103 or the contemplation of the Supreme Court in *Graham v. John Deere Co.*, 383 U.S. 1 (1966), and therefore the rejection must be reversed.

a. No reason to combine or modify.

Problems with the Examiner's proposed combination / modification have already been pointed out above with regard to the other cited art, and adding another citation does not mitigate the previously mentioned problems.

Additionally, the proposed combination of Ginsberg and Graff is incomprehensible to one having ordinary skill in the art--at the time of the invention and even today. Thus, no case of *prima facie* case of obviousness has been made out.

Examiner's Position

The Examiner's reason to combine Ginsberg and Graff is in the Final Rejection at pages 9-10:

> Ginsberg does not disclose that the property does not include any securities; however, it is well known to buy, sell, and analyze properties which are not securities by the usual meaning of the term, and Graff in particular teaches applying financial analysis to real estate related assets (see especially pages 51-52). Hence it would have been obvious to one of ordinary skill in the art of finance to apply the method of Ginsberg to property not including any securities, for the obvious advantage of determining the prices at which it would be expected to be profitable to buy or sell such property.

Applicant's Positions

The Examiner is correct that Ginsberg does not disclose that the property does not include any securities, especially because Ginsberg does not disclose an index system that handles any property; Ginsberg discloses an interest-rate index on a hypothetical portfolio of generic securities.

Though Ginsberg has not been shown to be modifiable to do what he rejected—handling honest to goodness property, the proposed combination is also improper for the reasons set out below.

(1) There is No Plausible Reason to Combine.

Ginsberg addresses a need for a real time barometer of the fixed income market with an interest-rate index and a hypothetical portfolio of "generic" securities, as discussed above regarding Group A. Graff pertains to leases and mortgages (see, e.g., page 52, second column, lines 13 and 18, respectively). Ginsberg and Graff have essentially nothing to do with each other, and the resulting notions of trading lease or mortgage options and futures is preposterous.

For example, speculating for a moment to try to make sense of the Examiner's idea of combining them, presumably the Examiner envisions some sort of real time index of hypothetical (Ginsberg) leases and/or mortgages (Graff) to support futures and options trading at financial exchanges of baskets (Ginsberg) of leases and mortgages?! (Graff)

Such an idea is stupefying and so farfetched as to be surreal: certainly a

plausible reason to combine has not been shown from the cited art.

First, as to Ginsberg's trading in view of Graff, a real time index for leases and mortgages does not seem to be doable at least because they are not fungible (e.g., reflecting the uniqueness of real estate is the common phrase that the 3 main sources for real estate value are "location, location, location"). Accordingly, trading in options or futures in unique things is very different from trading options or futures on stock or sugar, etc.

Second, for public options and futures trading at a financial exchange (as Ginsberg teaches), by law, one would need to register the Examiner's apparently implied lease or mortgage options or futures with either the SEC or CFTC. However, registering a lease or a mortgage option or future has not been shown to be doable under the law.

Third, even assuming one can find a way to make leases and mortgages fungible for trading, and obtain SEC and CFTC registrations for trading options or futures on the financial exchanges for leases and mortgages, such publically traded futures and options have not been shown to have any meaning in the art. The Examiner is required to show that the concepts from his proposed combination had some meaning in the art at the time of Applicant's priority date in 1992. In particular, in the context of public trading on a financial exchange and SEC or CFTC registration, (1) what is a future on a mortgage? (2) what is a future on a lease? (3) what is an option on a mortgage? and (4) what is an option on a lease? These would seem to be necessary prerequisites for the Examiner's proposed modification, as best as it can be understood, and these prerequisites have not been shown to have had any meaning to one having ordinary skill in the art at the time of the invention.

Fifth, if the Examiner can explain around the foregoing, the Examiner still must overcome the fact that Ginsberg's methodology applies to an interest-rate index and a hypothetical portfolio, not the claimed property. The Examiner purports to have some idea of how Ginsberg could handle honest to goodness property in the place of his hypothetical

portfolio of generic securities, which has not been shown and is clearly contrary to Ginsberg's teachings. If the Examiner can sidestep Ginsberg's intentional use of "hypothetical" and "generic" without contradicting Ginsberg's explicit teachings to the contrary, so as to handle honest to goodness property, then the Examiner must come up with some workable, reality-based system, and the Examiner has not explained how such a system could work. Graff's leases and mortgages, like Ginsberg's bonds, expire in time, so an index on any of them — other than in hypothetical terms — seems to make no sense. In time, the basis for honest to goodness bond index will expire, just like the basis for any honest to goodness lease index would expire, just like any honest to goodness mortgage index would expire. Indeed, the problem posed by bond expiration apparently motivated Ginsberg's invention of the hypothetical portfolio of generic, default-free securities. The Examiner must explain plausibly how his purported obvious modification of Ginsberg's interest-rate index and hypothetical portfolio might have some workable embodiment in reality.

For example, apparently the Examiner's proposed reality-based (property) index valuation would be some sort of real time barometer (Ginsberg) for the lease and/or mortgage (Graff) market, and the system inputs apparently would be analogous to Ginsberg's bids, asks, and trades but for real time trading of leases and mortgages (Graff), rather than for Treasury bills and notes. However, no such trading system has been shown to exist for leases and mortgages to provide such inputs into the methodology of Ginsberg—nor has the Examiner proposed how it could exist or even proposed any reason for it to exist. Indeed much of the information about mortgages and leases is not even publicly accessible, let alone accessible in Ginsberg's real time. The Examiner has made no showing of any real time trading of leases or mortgages (or even a reason for such a market) or how an embodiment could work so as to provide the input to Ginsberg's index valuation system.

Next, the Examiner has made no showing of how the Ginsberg/Graff output

could work. Pursuant to Ginsberg, presumably a basket (Ginsberg) of leases or mortgages (Graff) would be used to support futures trading on them through the financial exchanges (Ginsberg). But financial exchanges do not handle futures trading in leases or mortgages, as discussed above, and even assuming that the notion of an option or a future in a lease or a mortgage were to have some meaning (and even this has not been shown), trading in them would be illegal without SEC or CFTC registration.

Whatever could come from the Examiner's proposed combination is essentially unimaginable in reality. Ginsberg and Graff have essentially nothing to do with each other, and there is no possible reason to combine their teachings into anything meaningful, which the Examiner is required to do and has not done; thus there has been no showing of *prima facie* obviousness.

(2) Examiner's Reason to Combine is Insufficient.

As mentioned above, the Examiner is correct that "Ginsberg does not disclose that the property does not include any securities," (Final Rejection at pages 9-10) especially because Ginsberg is directed intentionally to a hypothetical portfolio of generic securities that are not property. Somehow, the Examiner either misses this point or believes that Ginsberg can be obviously modified to deal with actual, honest to goodness property not including any securities. Although this would destroy the above-mentioned purposes, intent, and functioning of Ginsberg before even trying to graft on Graff, for the sake of argument, let us play out some of the Examiner's argument to investigate the adequacy of the Examiner's proposed reason to combine.

One cannot tell from the above-quoted comments whether the Examiner is using the proposed combination with reference to the first claimed computer and respective market-based analysis or the second claimed computer and the second market-based analysis. The Examiner mentions "financial analysis" in the singular, so perhaps there is no recognition that a

second market-based analysis with the required output and input is required by the claims. Nothing in Graff or elsewhere in the record mentions a method step involving generating a respective market-based valuation using... the second computer and the input from the first computer with the input as defined in the claims. Ginsberg does not teach this either, as discussed in connection with Group A. Thus, the Examiner's explanation of a proposed reason to combine is insufficient because it does not explain the second market-based valuation using... the second computer and the input from the first computer with the input as defined in the claims.

The particulars of the Examiner's contention cannot be discerned from the vague explanation of a reason to combine, but the consequences of trying to combine Ginsberg and Graff are so surreal as to be unfathomable, as discussed above. Somehow the proposed combination must make sense in reality, and in the absence of a plausible reason to combine, no *prima facie* case of obviousness has been presented.

(3) Examiner's Proposed Modifications Are Inoperable and Not Enabled—Something Undoable is Not Obvious.

Ginsberg's bond portfolio index does not seem operable with something that is not a security—e.g., Ginsberg forms an index of property (bonds) that has coupon dates and coupon rates, and is actively traded (Col. 7, lines 37-47). This and other aspects of Ginsberg appear to have no meaning outside of securities. For example, master leases are not subject to a portfolio index, do not have coupon dates, do not have coupon rates, and were not actively traded. The same is true for other kinds of property that does not involve securities, e.g., furniture, real estate, etc.

In the Final Rejection at page 51, lines 1-4, the Examiner acknowledges that Ginsberg's hypothetical index cannot function with something other than securities, for example something that does not have coupon rates, but asserts that Graff 's paper "explicitly teaches

the similarity of commercial real estate leases to corporate bonds, with rent payments parallel to coupons, etc." The expression "teaches the similarity of object A to object B" is meaningless without greater specificity (for example, it can be used as justification for the assertion that an inventor who discusses the physical characteristics of water has disclosed the analogous characteristics of any other liquid, e.g. liquid mercury. Similarity, to whatever degree, is not the statutory standard for determining obviousness. Further, Graff's paper does not disclose the close parallel between Treasury coupons and rent payments asserted by the Examiner. If the parallel were as precise as assumed by the Examiner, then the value of a lease together with a single rent payment would be sufficient to determine an interest rate for the lease, as can be done with a Treasury bond and a single coupon payment; however, this determination is impossible for leases.

The Examiner's proposed modifications do not seem operable or enabled, and thus do not set out a *prima facie* case of obviousness.

(4) The Examiner Concedes that the Ginsberg Methodology is Inapplicable to Graff or the Claims.

The Examiner's explanation of allowable subject matter essentially concedes that Ginsberg and Graff cannot be made to fit together. The Board's attention is drawn to the Examiner's comments on the allowable subject matter at page 47 of the Final Rejection:

> Neither Ginsberg nor any other prior art of record discloses, teaches, or reasonably suggests generating the valuation for personal property as the property, nor could this be easily combined with Ginsberg methodology, since for example, *the Ginsberg methodology computes a discount or premium from par and a true yield to maturity, which are inapplicable to cars, furniture, or other tangible personal property. Tangible personal property can be leased*, and it would be possible to temporally decompose leased tangible personal property into an equity asset and a portfolio of debt instruments, by analogy to what Graff (cite omitted) teaches doing for real estate; however the mere potential of doing this does not make it obvious to do.

Graff is directed to leases and mortgages, which of course are actual, honest to

goodness property not including any securities, just like that in the *tangible personal property* in the allowed claims. And just like the allowed claims, in the words of the Examiner, *the Ginsberg methodology computes a discount or premium from par and a true yield to maturity, which are inapplicable to cars, furniture, or other tangible personal property*, and these are equally inapplicable to a lease or a mortgage or real estate in general. Furthermore, there is no *discount or premium from par and a true yield to maturity* applicable to any property not including any securities. In the further words of the Examiner: *Tangible personal property can be leased*, and in the case of the claims of this group, the property not including any securities not only can be leased, it actually is leased in Graff.

But as the Examiner's comments recognize, a method of valuing one thing does not necessarily teach a method of valuing something else, anymore than valuing a hypothetical index of generic securities together with an article on leases and mortgages teaches valuing *tangible personal property* (e.g., antique model trains) or property not including any securities (e.g., derivatives). Thus, the Examiner's reasons for allowing claims on tangible personal property are equally applicable to the claims on property not including any securities.

Either Ginsberg's methodology is applicable to the kind of property that can be leased, or it isn't (as the Examiner concedes in allowing some claims). The Examiner's concession is correct that *the Ginsberg methodology* is inapplicable to things that do not have *a discount or premium from par and a true yield to maturity*, like *tangible personal property* and (more generally) property not including any securities.

The Examiner lost the thread in this group of claims, missing the commonality with the allowed claims. As to the allowed claims, the Examiner has conceded the limitations of the *Ginsberg methodology*, and for good reason; and in doing so, he has also conceded and negated his proposed reason (and any reason) to combine for the claims of this Group. Therefore, no *prima facie* case of obviousness has been presented.

b. All claim limitations were not considered; many claim elements are not disclosed in the combination.

When making a determination concerning obviousness, all limitations of the claim must be evaluated. 35 U.S.C. Sec. 103, *In re Miller*, 418 F.2d 1392, 64 USPQ 46 (CCPA 1969). Thus, even if some way can be found to combine Ginsberg and Graff, no case of *prima facie* obviousness is made out where claim requirements have not been completely considered. The proposed combination of Ginsberg and Graff is insufficient to account for all of the claimed method steps. Thus, no case of *prima facie* case of obviousness has been made out.

(1) No cited art teaches generating a second...valuation for the property...with the second...computer.

Neither Graff nor indeed any other cited art teaches the claimed generating step involving a second market-based valuation for the property...with the second digital electrical computer.... Graff does not mention any computer, let alone enabling cooperation of a first computer and a second computer in a computer system, with the particular output / input that is claimed in the method steps.

Ginsberg's computers do very different things from the subject matter of Graff, as discussed below, but if any way could be found to combine the teachings, one still finds no cited art disclosing a method step of generating a second market-based valuation...with the second digital electrical computer.... Because neither Graff nor Ginsberg mention any such computer or any reason for generating a second market-based valuation...with the second digital electrical computer...and the input", no combination of them can teach or suggest this claimed requirement, and the Examiner has not made out a case of *prima facie* obviousness.

(2) No cited art teaches a market-based valuation... as part of the financial analysis output...as input to the second...computer such that the one could do the step of generating the second market-based valuation for the property using... the input.

Additionally, nothing in Graff teaches using a market-based valuation as an input

to anything, especially involving a computer. This is especially true in connection with sequential market-based valuations.

Ginsberg does not teach using such input in second market-based valuation either, as discussed in Group A. And neither Graff nor Ginsberg provides a reason to do so. It would not make sense to do so because neither is involved with any sequential market-based valuations for a property.

Because neither Graff nor Ginsberg mention using the input as claimed in the method, no combination of them can teach or suggest this claimed requirement, and the Examiner has not made out a case of *prima facie* obviousness.

(3) No cited art teaches generating a second financial analysis output, including the second market-based valuation.

Still further, there is a compounding significance to the lack of teaching of the two claim requirements mentioned above. As no cited art teaches the market-based valuation... as part of the financial analysis output...as input to the second...computer such that the one could do the step of generating the second market-based valuation for the property using... the input, there is no teaching of the required ingredients for carrying out the claimed

> generating a second financial analysis output, including the second market-based valuation, at an output means electrically connected to said second digital electrical computer.

No *prima facie* case of obviousness has been made because the Examiner failed to consider all claim limitations. In fact, the cited art does not teach at least three elements to the claimed method.

c. Official Notice / Insufficient Reason to Combine or Modify.

Applicant repeats with equal force the argument set forth above in Group A, as mentioned above regarding this Group, and problems with the Examiner's proposed combination / modification have already been pointed out above with regard to the other cited art, and adding

another citation does not mitigate the previously mentioned problems.

Moreso, there are some further Official Notice issues in connection with the rejection of claim 2. In the initial Office Action, the Examiner mentioned that "it is well known to buy, sell, and analyze properties which are not securities", and in the Response to that Office Action, Applicant required a reference. The Examiner cited nothing in response and thus cannot make this contention beyond the scope of what has been cited—here particularly only on Graff. Accordingly, Graff is insufficient evidence to support the Examiner's contention.

Additionally, the Examiner's proposed reason to combine Ginsberg with Graff and/or the Official Notice is insufficient for reasons set out above and further as follows. The Examiner states "it would have been obvious to one of ordinary skill in the art of finance to *apply the method of Ginsberg to property not including any securities*, for the obvious advantage of determining the prices at which it would be expected to be profitable to buy or sell such property." First, Ginsberg's interest-rate and hypothetical portfolio methodology is not directed to property of any sort, and the Examiner must explain how the method of Ginsberg could be applied to property not including any securities before he can make this reason to combine work. Ginsberg intentionally did his market-based valuation of a hypothetical portfolio with generic securities as a market barometer, so as to intentionally NOT deal with property. The Examiner must explain how to do what Ginsberg inherently rejected in his methodology.

Second, the Examiner's proposed reason to combine or modify is insufficient because it does not account for the second market-based valuation with the second computer, using the particularly claimed input, etc. The Examiner has not given a sufficient reason to combine the cited references *to reach the* claim*ed invention.* Thus, the Examiner has not made out a case of *prima facie* obviousness.

So even if one could somehow combine Ginsberg and Graff into something that works, the rejection is not a *prima facie* case of obviousness because no proper reason to

combine or modify has been set out, the official notice is improper, the proposed reason is insufficient to account for a combination or modification to reach the claimed invention as a whole, and all claim limitations have not been considered.

Summary Conclusion

Graff deals with master leases and mortgages of real estate, which like tangible personal property, are leased. As the Examiner asserts on page 47 of the Final Rejection, the *Ginsberg methodology* is inapplicable to things that do not have *a discount or premium from par and a true yield to maturity*, such as leases and mortgages (or any other property not including any securities).

Further, neither Ginsberg nor any other art of record discloses, teaches, or reasonably suggests generating the valuation for property not including any securities, nor could Graff and the Official Notice be easily combined with Ginsberg methodology, because for example, the Ginsberg methodology computes a discount or premium from par and a true yield to maturity, which are inapplicable to cars, furniture, or other tangible personal property. The same is true for master leases of real (and personal) property--a discount or premium from par and a true yield to maturity, which are inapplicable to master leases. And playing out the Examiner's argument still further, even if Ginsberg could somehow do a market-based valuation of a portfolio of master leases (hypothetical master lease index?) this would not be for any purpose contemplated in Graff or Ginsberg, such as serving as a barometer of the market, facilitating trading in a basket of market assets, or doing futures and options. Master leases are not traded. More so, there is no source for the Ginsberg input market data, especially in "real time," no basket, no futures or options trading based thereon, etc. It is difficult to fathom using the method of Ginsberg's market-based valuation of an interest-rate index to handle master leases, etc. leases of Graff, as the modification would seem to make no sense from the context of either teaching, e.g., outputting index data on anything related to master leases. The

Examiner's proposed reason to combine is too farfetched to even be comprehensible in reality, and thus it is not a *prima facie* case of obviousness.

Even if one could conjure up something plausible in this direction, the Examiner's contentions do not mention, let alone account for, other aspects of the Applicant's claims that are not shown in the combination, e.g., there is no method step using the second computer and the particular input defined in the claims in connection with generating the second market-based analysis, etc.

Even assuming that the Examiner is somehow using Graff to inspire adding the claimed input to the second...computer to Ginsberg such that the one could do the step of generating the second market-based valuation for the property using... the input " it is difficult to see how the index output of Ginsberg would be used in Graff: neither involves a second market-based analysis for a property, inputs and outputs are different, etc.

Graff deals only with valuation of master leases of commercial property and financing fee simple ownership by a combination of a master lease and a mortgage. But in the words of the Examiner above, *the Ginsberg methodology computes a discount or premium from par and a true yield to maturity, which are inapplicable* to master leases of commercial property and financing fee simple ownership by a combination of a master lease and a mortgage. Leases have no *discount or premium from par and a true yield to maturity (e.g., no face value)*, and thus the Ginsberg methodology would not work for them either.

Graff and Ginsberg have essentially nothing to do with each other. The proposed combination of Ginsberg and Graff is incomprehensible to one having ordinary skill in the art--at the time of the invention and ever since. Even so, the proposed combination is insufficient to account for all of the claimed method steps. Thus, no case of *prima facie* case of obviousness has been made out.

2. As to claims 118-127 and 138-147:

a. No teaching of a component of temporally decomposed property.

A component of one thing is not the same as a component of another, especially when it comes to forming a valuation, and statutory patentability does not depend on what the Examiner happens to think is a distinction without a difference. In this particular case, the Examiner's view is the sole voice contrary to that of those having ordinary skill in the art, as evidenced by IRS, Treasury, and case law.

As for the Examiner's assertion "that Graff teaches the temporal decomposition of property into components, some of which are similar to corporate bonds...", the record shows that Applicant's Specification and its predecessor specifications are the first teachings of temporal decomposition of property. See the response to the first Office Action and in paragraphs 11-14: The Graff article teaches nothing about the temporal decomposition of property, because the Graff article never addresses this subject.

Initially, the Examiner contended that Graff teaches "the temporal decomposition of property." But Graff discloses decomposing of property *benefits* into a lease and a leased fee. This is not a temporal decomposition – or any decomposition of the property -- because the owner of the fee owns the property. The owner of the property never surrenders any property rights in Graff; the lease owner merely receives some economic benefits. To decompose the property, one must break up ownership somehow.

Note that although Graff mentions "fee simple property ownership is separated temporally into term and residual property ownership, with term ownership running until existing leases expire and residual ownership commencing when the leases expire" at page 53, second column, lines 21-25 (and does not mention "remainder"), the statement is set in a context with a different meaning than inferred by the Examiner. This is clear because Graff states that "the functional equivalent of term ownership can readily be created in a single-tenant property by an

appropriate form of master lease on the facility coincident with the term of the existing lease. The term owner is the holder of the master lease; the residual equity holder is the legal owner of the property while the master lease is in force." Page 53, second column, lines 28-35. This is not a decomposition of property ownership, but instead is a decomposition of economic benefits. The Examiner has not shown that Graff's statement, even taken out of its context, would have enabled one having ordinary skill in the art to do a temporal decompositon of leased real estate.

The Examiner apparently agrees and retrenches his legal position at page 52 of the Final Rejection:

> Applicant argues... that Graff does not teach a temporal decomposition of property, but rather of economic benefits. Given that the decomposition taught by Graff is temporal, this is held to be a distinction without a difference.

But IRS rulings, Treasury regulations, and federal court decisions are all contrary to the Examiner's opinion of what is "a distinction without a difference." Thus, if the Examiner were to take this position in an IRS filing, he could wind up penalized for filing a frivolous tax return. For authority contrary to the Examiner's opinion, see

1. Treasury Regulation 1.1014-5c, Example 5.
2. Internal Revenue Code Revenue Ruling 62-132

   cite: 1962-2c.b.73
3. Manufacturers Hanover Trust Company vs. Commissioner

   cite: 431f.2d 664 (Second Circuit 1970)

By contrast, other authorities make the tax treatment of carved-out lease interests unclear. Authorities for this are the following:

4. Ellison vs. Commissioner

   cite: 80TC 378 (1983)
5. Bryant vs. Commissioner

cite 399f.2d 800

Contrary to the Examiner's opinion of what is "a distinction without a difference," the Tax Code views the respective processes and the resulting components differently. Furthermore, the code encourages the courts and the IRS to look through formal legal structure to economic substance to determine tax treatment. Accordingly, differences in the tax perspectives establishes that those having ordinary skill in the art view the two processes as having different substance. Because various tax authorities make the tax treatment of term and remainder property interests different from the tax treatment of separated economic benefits, the Examiner's view to the contrary is inexplicable, unsustainable, and far from the standards for determining obvious set forth by the U.S. Supreme Court in *Graham v. John Deere Co.*, 383 U.S. 1 (1966). The Examiner has not shown (and in view of contrary tax authority cannot show) why one having ordinary skill in the art would have turned to Graff re decomposition of economic benefits for a methodology for decomposition of property.

The Examiner's rejection based on his personal view of what constitutes "a distinction without a difference," contrary to the IRS, Treasury, and case law, falls short of a case of *prima facie* obviousness, and the rejection must be reversed.

b. No teaching of the claimed system-determined purchase price for a component of temporally decomposed property.

There is no disclosure of a system determined purchase price in consummating a sale for the claimed property, which is not shown by Ginsberg. First, the only sales related to Ginsberg's index system output are of options and futures (see Fig. 6, which illustrates the Options Exchange and the Futures Exchange, and related discussion). Ginsberg's index system does not carry out the operations of the Exchanges. However, the sales of options and futures are not the same subject as the subject matter of Ginsberg's valuation of the hypothetical portfolio of generic bonds for his index (setting aside for the moment that this is not property). The claims

of this group require that the price and valuation are directed to the same property.

Second, although Ginsberg does compute a "price" for his hypothetical portfolio, no one is consummating a sale of the hypothetical portfolio. Indeed, such a sale is impossible, because something hypothetical is not property, as discussed above. The hypothetical portfolio price is used as a measure of performance for a basket of securities, upon which futures and options are based.

Third, in the Final Rejection at page 51, line 13-page 52, line 4: the Examiner argues that "Ginsberg discloses his system determining a purchase price (col. 9, lines 45-59, presumably in particular line 47), and then using that purchase price in consummating sales (col. 9, line 60 through col. 10, line 7)." However, the "price" in Column 9, line 47 of Ginsberg does not include the adjective "purchase" or "sale" because it is not a transaction price, but rather is an index valuation of a hypothetical portfolio of generic securities based on previous transactions (in fact, the words "purchase" and "sale" never appear in Col. 9, lines 45-59). The price/index valuation derived by Ginsberg is then used by "index traders, investors, pension fund managers, and other participants (to) make determinations of market valuations of the duration sized portfolio. In so doing, bid, offer and execution decisions are implemented instantaneously by traders. These decisions are enacted through computer terminals.." (col. 9, lines 61-65). But Ginsberg does not disclose a system-determined purchase price of the property, system-determined bid valuations, system-determined ask valuations, or system-determined transaction valuations, because the Ginsberg invention was not designed for this purpose.

Graff does not teach or enable any system-determined purchase price of the property for a component temporally decomposed from the property (and again, Ginsberg has neither the system-determined price nor the property for the price). This claim element has been ignored in the Examiner's attempt to make up an obviousness argument from pieces

rather than consider the claim as a whole.

Accordingly, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

c. No reason to combine.

At page 33 of the final rejection, the Examiner asserts that there was an "obvious advantage of determining at what prices it would be profitable to buy or sell a component of temporally decomposed property." If the Examiner were correct, then homeowners, car owners, and furniture owners would be valuing their homes, cars, and furniture every day of the week. Further, the Examiner's reasoning assumes facts that he has not shown in meeting his required burden of proof. There has been no showing of any "determining at what prices it would be profitable to buy or sell a component of temporally decomposed property;" and there has been no showing that any such advantage was known to exist before Applicant's invention. Thus, there has been no showing that any such advantage was obvious, or that anyone would have thought to combine Ginsberg's "Fixed Income Portfolio Index Processor" with Graff's "Impact of Tax Issues on Real Estate Debt and Equity Separation" (if somehow these could be combined) to reach the Applicant's claimed invention (overlooking for the moment the fact that neither teaches the claimed system-determined purchase price of the property for a component of temporally decomposed property.)

The Examiner makes similar allegations for the other claims in this group, but in each situation, the Examiner is trying to find art for the kind of property being valued, rather than the valuation method for the property. By failing to consider the claim as a whole, piecing together Ginsberg's valuation of an index with the prior existence of some kind of property does not mean that the Ginsberg index valuation approach would be at all applicable to the piece of property at issue in the dependent claims. As a consequence of failing to consider the claim as a whole, the art is not even close to establishing *prima facie* obviousness.

More particularly, in the Final Rejection at page 50, line 21-page 51, line 4, the Examiner argues that it would have been obvious to combine Ginsberg with Graff to apply the invention of Ginsberg to something that is not a generic Treasury security, i.e., not a hypothetical portfolio of Treasuries. Because leased assets that are not securities involve default risk, the Examiner's assertion contradicts his concession in Paragraph 47 of the first Office Action that the valuation methodology in Ginsberg "reflects a risk-free rate in as much as Ginsberg does not disclose taking a non-zero risk into account." Ginsberg felt the need to disclose a reason for omitting default risk from his invention ("one important aspect of Treasuries in the context of the present invention is the minimal and uniform default risk; the issuance of U.S. government paper removes the default risk as a defining criteria in the relative pricing of Treasuries in the market place (Col. 1, lines 55-60)). However, the Examiner assertion that Ginsberg's invention can be applied to risky assets like real estate is contrary to Ginsberg.

Accordingly, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

d. As to claims 119, 124, 139, and 144 there also is no teaching of the claimed remainder interest.

As stated above, with regard to claim 118, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property. More particularly, there is no teaching of a remainder interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

The Board's attention is drawn to the Final Rejection, page 52, line 20-page 53, line 12. At page 52, lines 10-12, the Examiner asserts that "merely because Graff does not use the term 'remainder' (in the Graff article) does not mean that Graff does not disclose the

substance of a remainder interest."

The Board is requested to take Official Notice of the plain and ordinary meaning of the word, for example in a law dictionary, to see that the word "remainder" refers to a particular type of property interest, whereas the word "residual" refers to a more general type of property interest. See, e.g., "Law Dictionary," 3rd Ed., Steven H. Gifis, 1991 (roughly contemporary with the priority date of the instant patent application), pages 408-409, enclosed. Because the terms have distinct and different precise legal meanings, the Examiner's quoted assertion (and ground of rejection) is incorrect in the assertion unless he can find a description of the claimed property interest in the Graff article that coincides with the legal definition of a remainder interest, and Applicant asserts that the Examiner cannot satisfy this requirement.

Accordingly, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

e. As to claims 120, 125, 140, and 145 there also is no teaching of the claimed equity interest in a remainder interest.

As stated above, with regard to claim 118, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property. More particularly, there is no teaching of an equity interest in a remainder interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

The Examiner concedes that there is no disclosure of an equity interest in a remainder interest and relies solely on the prior existence of equity interests to imagine equity interest in a remainder interest in further imagining that it would be obvious to do the particularly claimed method ... having a system determined purchase price for the equity interest in a remainder interest.

Respectfully, the Examiner is just making up things. Nothing in the art or Office

Action mentions an equity interest in a remainder interest. Nothing indicates how to do a valuation of one either. Based on the art of record, no one would have any idea of Applicant's invention, let alone be enabled to practice the claimed invention.

The Examiner has cited art of equity interests in other things, e.g., shares of stock in a corporation and equity interests in non-incorporated partnerships, in the Final Rejection, at page 34. None of these involve the claimed remainder interest.

Further, Applicant required references to support the Official Notice, and the Examiner's citations do not show the claimed remainder interest. The only mention in the record of equity interest in a remainder interest is in the claims. With this in mind, the Examiner's case is a long way from showing any method of valuing one.

And further with no reason to even combine or modify the cited art, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

f. As to claims 121, 126, 141, and 146, there also is no teaching of the claimed estate for years interest.

As stated above, with regard to claim 118, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property. More particularly, there is no teaching of an estate for years interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

The Board's attention is drawn to page 53, lines 10-12, of the Final Rejection wherein the Examiner asserts that the expression "estate for years" is equivalent to the "portfolio of debt instruments" in the Graff article, although "estate for years" does not appear in the Graff article. The "portfolio of debt instruments" in the Graff article can only be interpreted as a portfolio of leases based on the context of the Graff article, as discussed above with regard to claim 118. By contrast, "estate for years" is well defined in real estate law.

Again, because "estate for years" does not appear in the Graff article, the Examiner must show where in the Graff article a description coinciding with the definition of the claimed estate for years appears if the Examiner is to support his assertion that the Graff article discloses decompositions that involve estates for years other than leases, and Applicant asserts that the Examiner cannot do so. Furthermore, Applicant asserts that, when combined with the precisely defined term "remainder interest," as in "estate for years/remainder interest separation," the expression "estate for years" can only refer to a term of years equity interest. Because neither "remainder" nor "estate for years" nor any description corresponding to them appears in the Graff article, it follows that the Graff article does not disclose the temporal property decomposition of the interest as claimed herein.

And further with no reason to even combine or modify the cited art, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

g. As to claim 122, 127, 142, and 147 there also is no teaching of the claimed term of years interest.

As stated above, with regard to claim 118, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property. More particularly, there is no teaching of a term of years interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

A term of one thing is not a term of another, and it is fortunate that the Graff article did not make passing mention of a "term paper." The use of the word "term" on page 53 of Graff, which forms the basis for the Examiner's rejection, is in connection with the term of a lease. If anyone feels that the term of a lease is equivalent to a term of years, they can try to claim amortization of a lease in a tax filing to obtain a swift lesson from the IRS in the difference.

Contrary to the Examiner's assertion at page 35 of the Final Rejection, there is nothing in Graff about "determining at what prices it would be profitable to buy or sell a term of years interest in temporally decomposed property."

And further with no reason to even combine or modify the cited art to reach the claimed invention, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

3. As to claims 123-127 and 143-147

a. No teaching of the claimed fractional interest.

As pointed out above, Graff does not teach temporally decomposed property. Therefore, Graff does not teach a species of a component of temporally decomposed property. Therefore, Graff does not teach a fractional interest in a component of temporally decomposed property. Therefore, Graff does not teach or suggest any method for valuing one either.

The Examiner relies on Official Notice of stocks (at page 35 of the Final Rejection) as evidence that fractional interests in corporations was known. In response it is noted that the prior existence of a fractional interest in one thing (corporations) is not the same as a fractional interest in another thing (a component of temporally decomposed property) and methods to value them are not the same either. The record shows no method of generating a valuation of a component of temporally decomposed property suggested anywhere other than in Applicant's patent application.

Applicant does not claim to be the first to conceive of a fractional interest. However, it is respectfully submitted that no one would have thought of a means for valuing a fractional interest in a remainder of property from the master lease, etc. discussion in Graff. More so, the IRS has long recognized a significant difference exists between valuations of fractional interests in liquid assets and illiquid assets. For example, for gift tax purposes, the IRS allows a discount in the valuation of a minority fractional interest in an illiquid asset (such

as a remainder interest) from the value obtained by multiplying the fraction of the fractional interest by the value of the illiquid asset, but does not allow the discount in the case of a liquid asset. Therefore the Examiner's contention that fractional interests were well known does not imply that the particularly claimed valuation of the fractional interests was well known from Graff. Therefore, the Examiner's conclusions based thereon are incorrect. Furthermore, the Examiner asserts that there was an "obvious advantage of pricing and trading interests smaller and more conveniently purchasable than the whole value of the remainder interest." Because there has been no showing any trading of such smaller interests in remainder interests, there has been no showing that any such advantage was known to exist before Applicant's invention—and certainly not that any such advantage was obvious.

The Examiner has failed *prima facie* showing of the claim as a whole, and the rejection must therefore be reversed.

F. Incorporation by reference: D1, E1, and F1, and further, Ginsberg, Graff, Epstein, Official Notice, and art relied thereon are insufficient for *prima facie* obviousness because:

1. As to claims 128-137

a. No reason whatsoever to combine or modify.

A reason to modify or combine references is required by law in determining obviousness. See, e.g., *In re Lee; In re Rouffet; In re Kotzab.* No reason has been given for the combination pertaining to these claims. See the Final Rejection at page 37. *Per se* the Examiner has not made out a case of *prima facie* obviousness as to these claims, the rejection is improper, and the rejection must be reversed.

2. As to claims 16, 128-137

a. No reason to combine or modify.

Problems with the Examiner's proposed combination / modification have already been pointed out above with regard to the other cited art, and adding another citation does not

mitigate the previously mentioned problems. In addition to the discussions of D1, E1, F1 reasserted here, note that D1 addresses the combination of Ginsberg and Epstein, and E1 addresses the combination of Ginaberg and Graff. As per F1, no reason whatsoever is given for trying to add Epstein into the mix, and providing no reason whatsoever is improper support for a rejection *per se*.

Not previously addressed is the proposed combination of Epstein and Graff. Although the Examiner provides no reason to combine Epstein with Ginsberg and Graff, the Examiner comments in the Final Rejection at pages 11-12:

> Hence, it would have been obvious... to carry out the step of controlling with the expected return under a performance scenario... for the obvious advantage of obtaining estimates of what return could plausibly be expected.

To the extent that this statement is understandable, Graff is dealing with separating the lease benefits from whatever remains in the property, as discussed above. Graff does not make any bonds. Epstein is directed to selecting bonds based, in part, on duration. One having ordinary skill in the art would not use Epstein's bond selection criteria to select piece of property, a lease, or to select lease rights, or to price any of them. For example, Epstein's "duration" has nothing to do with indefinitely owning property.

Epstein deals with bond selection criteria, and Graff does not have bonds. In the absence of any explanation as to why the Examiner has strung these together (except to match with Applicant's claim in hindsight), there is no apparent reason why one anyone having ordinary skill in the art would have ever thought to combine Graff with Epstein, especially as neither of these is properly combinable with Ginsberg, as discussed in sections D1 and E1.

With no stated or apparent reason for combining or modifying Ginsberg, in view of Graff and Epstein, especially in combination with the other nonanalogous cited art (Active LCD Technology, Analog Computing, a Decimal Point Or Comma Printing, a Digital Sine generator, an Optical-Digital Computer, the particular communications link disclosure of the

'238) upon which the rejection is premised, the rejection is improper, insufficient for *prima facie* obviousness, and must be reversed.

b. Failure to consider the claim as a whole.

The Examiner has not considered the claim as a whole, stringing Epstein into the almost amazing collection of disparate art for no stated or apparent reason, and yet failing to show *prima facie* obviousness of the claim as a whole. The rejection is improper, is not a showing of *prima facie* obviousness, and must be reversed.

c. As to claim 16, incorporate by reference E1 and further there is no disclosure of the claimed *market-based valuation reflecting* an expected return under a performance scenario.

The argument of E1 is incorporated here with equal force here. Furthermore, the additon of Epstein does not mitigate the problems with Ginsberg discussed in E1.

Epstein does not teach how to do a market-based valuation reflecting an expected return under a performance scenario. No cited art teaches this step. The Examiner's contention is directed to a portion of the claim, expected return under a performance scenario and not the claim as a whole, thereby missing that the claim actually requires doing a *market-based valuation reflecting* an expected return under a performance scenario (italics added to highlight what the Examiner overlooked).

Accordingly the Examiner has not made a case of *prima facie* obviousness, and the rejection must be reversed.

d. Incorporate by reference D, and further as to claim 128, there is no teaching of the claimed component temporally decomposed from property.

The argument of D (especially as regards claim 65, upon which claim 128 depends) is incorporated here with equal force here.

More particularly, there is no disclosure of a system determined purchase price in consummating a sale for the claimed property, which is not shown by Ginsberg. First, the only

sales related to Ginsberg's index system output are of options and futures (see Fig. 6, which illustrates the Options Exchange and the Futures Exchange, and related discussion). Ginsberg's index system does not carry out the operations of the Exchanges. However, the sales of options and futures are not the same subject as the subject matter of Ginsberg's valuation of the hypothetical portfolio of generic bonds for his index (setting aside for the moment that this is not property). The claims of this group require that the price and valuation be directed to the same property.

Second, although Ginsberg does compute a "price" for his hypothetical portfolio, no one is consummating a sale of the hypothetical portfolio. Indeed, such a sale is impossible, because something hypothetical is not property, as discussed above. The hypothetical portfolio is used as a measure of performance for a basket of securities, upon which futures and options are based.

Third, in the Final Rejection at page 51, line 13-page 52, line 4: the Examiner argues that "Ginsberg discloses his system determining a purchase price (col. 9, lines 45-59, presumably in particular line 47), and then using that purchase price in consummating sales (col. 9, line 60 through col. 10, line 7)." However, the "price" in Column 9, line 47 of Ginsberg does not include the adjective "purchase" or "sale" because it is not a transaction price, but rather is an index valuation of a portfolio based on previous transactions (in fact, the words "purchase" and "sale" never appear in Col. 9, lines 45-59). The price/index valuation derived by Ginsberg is then used by "index traders, investors, pension fund managers, and other participants (to) make determinations of market valuations of the duration sized portfolio. In so doing, bid, offer and execution decisions are implemented instantaneously by traders. These decisions are enacted through computer terminals.." (col. 9, lines 61-65). But Ginsberg does not disclose a system-determined purchase price of the property, system-determined bid valuations, system-determined ask valuations, or system-determined transaction valuations,

because the Ginsberg invention was not designed for this purpose.

Fourth, Graff does not teach or enable any system-determined purchase price of the property for a component temporally decomposed from the property (and again, Ginsberg has no system-determined price or the property for the price either). This claim element has been ignored in the Examiner's attempt to make up an obviousness argument from pieces rather than consider the claim as a whole.

A component of one thing is not the same as a component of another, especially when it comes to forming a valuation, and statutory patentability does not depend on what the Examiner happens to think is a distinction without a difference. In this particular case, the Examiner's view is the sole voice contrary to that of those having ordinary skill in the art, as evidenced by IRS rulings, Treasury regulations, and federal court decisions.

As for the Examiner's assertion "that Graff teaches the temporal decomposition of property into components, some of which are similar to corporate bonds...", the record shows that Applicant's Specification and its predecessor specifications are the first teachings of temporal decomposition of property. See the response to the first Office Action and in paragraphs 11-14: The Graff article teaches nothing about the temporal decomposition of property, because the Graff article never addresses this subject.

Initially, the Examiner contended that Graff teaches "the temporal decomposition of property." But Graff discloses decomposing of property *benefits* into a lease and a leased fee. This is not a temporal decomposition – or any decomposition of the property – because the owner of the fee owns the property. The owner of the property never surrenders any property rights in Graff; the lease owner merely receives some economic benefits. To decompose the property, one must break up ownership somehow.

Note that although Graff mentions "fee simple property ownership is separated temporally into term and residual property ownership, with term ownership running until existing

leases expire and residual ownership commencing when the leases expire" at page 53, second column, lines 21-25 (and does not mention "remainder"), the statement is set in a context with a different meaning than inferred by the Examiner. This is clear because Graff states that "the functional equivalent of term ownership can readily be created in a single tenant-property by an appropriate form of master lease on the facility coincident with the term of the existing lease. The term owner is the holder of the master lease; the residual equity holder is the legal owner of the property while the master lease is in force." Page 53, second column, lines 28-35. This is not a decomposition of property ownership, but instead is a decomposition of economic benefits.

The Examiner apparently agrees and retrenches his legal position at page 52 of the Final Rejection:

> Applicant argues... that Graff does not teach a temporal decomposition of property, but rather of economic benefits. Given that the decomposition taught by Graff is temporal, this is held to be a distinction without a difference.

But IRS rulings, Treasury regulations, and federal court decisions are all contrary to the Examiner's opinion of what is "a distinction without a difference." Thus, if the Examiner were to take this position in an IRS filing, he could wind up penalized for filing a frivolous tax return. For authority contrary to the Examiner's opinion, see

1. Treasury Regulation 1.1014-5c, Example 5.
2. Internal Revenue Code Revenue Ruling 62-132

   cite: 1962-2c.b.73
3. Manufacturers Hanover Trust Company vs. Commissioner

   cite: 431f.2d 664 (Second Circuit 1970)

By contrast, other authorities make the tax treatment of carved-out lease interests unclear. Authorities for this are the following:

4. Ellison vs. Commissioner

cite: 80TC 378 (1983)

5. Bryant vs. Commissioner

cite 399f.2d 800

Contrary to the Examiner's opinion of what is "a distinction without a difference," the Tax Code views the respective processes and the resulting components differently. Furthermore, the code encourages the courts and the IRS to look through formal legal structure to economic substance to determine tax treatment. Accordingly, differences in the tax perspectives establishes that those having ordinary skill in the art view the two processes as having different substance. Because various tax authorities make the tax treatment of term and remainder property interests different from the tax treatment of separated economic benefits, the Examiner's view to the contrary is inexplicable, unsustainable, and far from the standards for determining obvious set forth by the U.S. Supreme Court in *Graham v. John Deere Co.*, 383 U.S. 1 (1966). The Examiner has not shown (and in view of contrary tax authority cannot show) why one having ordinary skill in the art would have turned to Graff re decomposition of economic benefits for a methodology for decomposition of property.

The Examiner's rejection based on his view of "a distinction without a difference," contrary to the IRS rulings, Treasury regulations, and federal court decisions, falls short of a case of *prima facie* obviousness, and the rejection must be reversed.

In addition, Epstein does not add any relevant teaching to mitigate the issues raised in D, incorporated from above. More so, as pointed out above, Epstein does not teach how to do a *market-based valuation reflecting* an expected return under a performance scenario (italics added to highlight what the Examiner overlooked).

Further, the Examiner has not considered the claim as a whole, stringing Epstein into the case for no apparent reason, and yet failing to show *prima facie* obviousness as a whole. The rejection must therefore be reversed.

i. As to claim 129, there also is no teaching of the claimed remainder interest.

As stated above, with regard to claim 128, because there is no teaching of a component of temporally decomposed property, there can be no teaching of a species of the component of temporally decomposed property. More particularly, there is no teaching of a remainder interest or a valuation thereof. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

The Board's attention is drawn to the Final Rejection, at page 37, which essentially points to the rejection of claims 124-127, and more particularly to page 52, line 20-page 53, line 12. At page 52, lines 10-12, the Examiner asserts that "merely because Graff does not use the term 'remainder' (in the Graff article) does not mean that Graff does not disclose the substance of a remainder interest."

The Board is requested to take Official Notice of the plain and ordinary meaning of the word, for example in a law dictionary, to see that the word "remainder" refers to a particular type of property interest, whereas the word "residual" refers to a more general type of property interest. See, e.g., "Law Dictionary," 3rd Ed., Steven H. Gifis, 1991 (roughly contemporary with the priority date of the instant patent application), pages 408-409, enclosed. Because the terms have distinct and different precise legal meanings, the Examiner's quoted assertion (and ground of rejection) is incorrect in the assertion unless he can find a description of the claimed property interest in the Graff article that coincides with the legal definition of a remainder interest, and Applicant asserts that the Examiner cannot satisfy this requirement.

Epstein adds nothing to the mix because it does not disclose the claimed *market-based valuation reflecting* an expected return under a performance scenario (italics added to highlight what the Examiner overlooked).

Accordingly, the Examiner has failed to make out a case of *prima facie*

obviousness, and the rejection must be reversed.

ii. As to claim 130, there also is no teaching of the claimed equity interest in a remainder interest.

As stated above, with regard to claim 129, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property. More particularly, there is no teaching of an equity interest in a remainder interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

The Examiner concedes that there is no disclosure of an equity interest in a remainder interest and relies solely on the prior existence of equity interests to imagine equity interest in a remainder interest in further imagining that it would be obvious to do the particularly claimed method ... having a system determined purchase price for the equity interest in a remainder interest.

Respectfully, the Examiner is just making up things. Nothing in the art or Office Action mentions an equity interest in a remainder interest. Nothing indicates how do do a valuation of one either. Based on the art of record, no one would have any idea of Applicant's invention, let alone be enabled to practice the claimed invention.

The Examiner has cited art of equity interests in other things, e.g., shares of stock in a corporation and equity interests in non-incorporated partnerships, in the Final Rejection, at page 34. None of these involve the claimed remainder interest.

Further, Applicant required references to support the Official Notice, and the Examiner's additional citations do not show the claimed remainder interest. The only mention in the record of equity interest in a remainder interest is in the claims. With this in mind, the Examiner's case is a long way from showing any method of valuing one.

Epstein adds nothing to the mix because it does not disclose the claimed *market-*

based valuation reflecting an expected return under a performance scenario (italics added to highlight what the Examiner overlooked).

And further with no reason to even combine or modify the cited art, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

iii. As to claim 131, there also is no teaching of the claimed estate for years interest.

As stated above, with regard to claim 128, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property. More particularly, there is no teaching of an estate for years interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

The Board's attention is drawn to page 53, lines 10-12, of the Final Rejection wherein the Examiner asserts that the expression "estate for years" is equivalent to the "portfolio of debt instruments" in the Graff article, although "estate for years" does not appear in the Graff article. The "portfolio of debt instruments" in the Graff article can only be interpreted as a portfolio of leases based on the context of the Graff article, as discussed above with regard to claim 118. By contrast, "estate for years" is well defined in real estate law.

Again, because "estate for years" does not appear in the Graff article, the Examiner must show where in the Graff article a description coinciding with the definition of the claimed estate for years appears if the Examiner is to support his assertion that the Graff article discloses decompositions that involve estates for years other than leases, and Applicant asserts that the Examiner cannot do so. Furthermore, Applicant asserts that, when combined with the precisely defined term "remainder interest," as in "estate for years/remainder interest separation," the expression "estate for years" can only refer to a term of years equity interest. Because neither "remainder" nor "estate for years" nor any description corresponding to them

appears in the Graff article, it follows that the Graff article does not disclose the temporal property decomposition of the interest as claimed herein.

Epstein adds nothing to the mix because it does not disclose the claimed *market-based valuation reflecting* an expected return under a performance scenario (italics added to highlight what the Examiner overlooked).

And further with no reason to even combine or modify the cited art, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

iv. As to claim 132, there also is no teaching of the claimed term of years interest.

As stated above, with regard to claim 128, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property. More particularly, there is no teaching of a term of years interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

A term of one thing is not a term of another, and it is fortunate that the Graff article did not make passing mention of a "term paper." The use of the word "term" on page 53 of Graff, which forms the basis for the Examiner's rejection, is in connection with the term of a lease. If anyone feels that the term of a lease is equivalent to a term of years, they can try to claim amortization of a lease in a tax filing to obtain a swift lesson from the IRS in the difference.

Contrary to the Examiner's assertion at page 35 of the Final Rejection, there is nothing in Graff about "determining at what prices it would be profitable to buy or sell a term of years interest in temporally decomposed property."

Epstein adds nothing to the mix because it does not disclose the claimed *market-based valuation reflecting* an expected return under a performance scenario (italics added to

highlight what the Examiner overlooked).

And further with no reason to even combine or modify the cited art to reach the claimed invention, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

e. Incorporate by reference F1b, and further as to claim 133-137, there is no teaching of the claimed fractional interest.

As pointed out above, Graff does not teach temporally decomposed property. Therefore, Graff does not teach a species of a component of temporally decomposed property. Therefore, Graff does not teach a fractional interest in a component of temporally decomposed property. Therefore, Graff does not teach or suggest any method for valuing one either.

The Examiner relies on Official Notice of stocks (at page 35 of the Final Rejection) as evidence that fractional interests in corporations were known. In response it is noted that the prior existence of a fractional interest in one thing (corporations) is not the same as a fractional interest in another thing (a component of temporally decomposed property) and methods to value them are not the same either. The record shows no method of generating a valuation of a component temporally decomposed property suggested anywhere other than in Applicant's patent application.

Applicant does not claim to be the first to conceive of a fractional interest. However, it is respectfully submitted that no one would have thought of a means for valuing a fractional interest in a remainder of property from the master lease, etc. discussion in Graff. More so, the IRS has long recognized a significant difference exists between valuations of fractional interests in liquid assets and illiquid assets. For example, for gift tax purposes, the IRS allows a discount in the valuation of a minority fractional interest in an illiquid asset (such as a remainder interest) from the value obtained by multiplying the fraction of the fractional interest by the value of the illiquid asset, but does not allow the discount in the case of a liquid

asset. Therefore the Examiner's contention that fractional interests were well known does not imply that valuation of the fractional interests was well known from Graff. Therefore, the Examiner's conclusions based thereon are incorrect. Furthermore, the Examiner asserts that there was an "obvious advantage of pricing and trading interests smaller and more conveniently purchasable than the whole value of the remainder interest." Because there has been no showing any trading of such smaller interests in remainder interests, there has been no showing that any such advantage was known to exist before Applicant's invention—and certainly not that any such advantage was obvious.

Epstein adds nothing to the mix because it does not disclose the claimed *market-based valuation reflecting* an expected return under a performance scenario (italics added to highlight what the Examiner overlooked).

The Examiner has failed *prima facie* showing of the claim as a whole, and the rejection must therefore be reversed.

i. As to claim 134, there also is no teaching of the claimed remainder interest.

As stated above, with regard to claim 133, because there is no teaching of a component of temporally decomposed property, there can be no teaching of a species of the component of temporally decomposed property. More particularly, there is no teaching of a remainder interest or a valuation thereof. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

The Board's attention is drawn to the Final Rejection, at page 37, which essentially points to the rejection of claims 124-127, and more particularly to page 52, line 20-page 53, line 12. At page 52, lines 10-12, the Examiner asserts that "merely because Graff does not use the term 'remainder' (in the Graff article) does not mean that Graff does not disclose the substance of a remainder interest."

The Board is requested to take Official Notice of the plain and ordinary meaning of the word, for example in a law dictionary, to see that the word "remainder" refers to a particular type of property interest, whereas the word "residual" refers to a more general type of property interest. See, e.g., "Law Dictionary," 3rd Ed., Steven H. Gifis, 1991 (roughly contemporary with the priority date of the instant patent application), pages 408-409, enclosed. Because the terms have distinct and different precise legal meanings, the Examiner's quoted assertion (and ground of rejection) is incorrect in the assertion unless he can find a description of the claimed property interest in the Graff article that coincides with the legal definition of a remainder interest, and Applicant asserts that the Examiner cannot satisfy this requirement.

Epstein adds nothing to the mix because it does not disclose the claimed *market-based valuation reflecting* an expected return under a performance scenario (italics added to highlight what the Examiner overlooked).

Accordingly, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

ii. As to claim 135, there also is no teaching of the claimed equity interest in a remainder interest.

As stated above, with regard to claim 133, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property. More particularly, there is no teaching of an equity interest in a remainder interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole.*

The Examiner concedes that there is no disclosure of an equity interest in a remainder interest and relies solely on the prior existence of equity interests to imagine equity interest in a remainder interest in further imagining that it would be obvious to do the particularly claimed method ... having a system determined purchase price for the equity interest in a

remainder interest.

Respectfully, the Examiner is just making up things. Nothing in the art or Office Action mentions an equity interest in a remainder interest. Nothing indicates how do do a valuation of one either. Based on the art of record, no one would have any idea of Applicant's invention, let alone be enabled to practice the claimed invention.

The Examiner has cited art of equity interests in other things, e.g., shares of stock in a corporation and equity interests in non-incorporated partnerships, in the Final Rejection, at page 34. None of these involve the claimed remainder interest.

Further, Applicant required references to support the Official Notice, and the Examiner's additional citations do not show the claimed remainder interest. The only mention in the record of equity interest in a remainder interest is in the claims. With this in mind, the Examiner's case is a long way from showing any method of valuing one.

Epstein adds nothing to the mix because it does not disclose the claimed *market-based valuation reflecting* an expected return under a performance scenario (italics added to highlight what the Examiner overlooked).

And further with no reason to even combine or modify the cited art, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

iii. As to claim 136, there also is no teaching of the claimed estate for years interest.

As stated above, with regard to claim 133, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property. More particularly, there is no teaching of an estate for years interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole.*

The Board's attention is drawn to page 53, lines 10-12, of the Final Rejection

wherein the Examiner asserts that the expression "estate for years" is equivalent to the "portfolio of debt instruments" in the Graff article, although "estate for years" does not appear in the Graff article. The "portfolio of debt instruments" in the Graff article can only be interpreted as a portfolio of leases based on the context of the Graff article, as discussed above with regard to claim 118. By contrast, "estate for years" is well defined in real estate law.

Again, because "estate for years" does not appear in the Graff article, the Examiner must show where in the Graff article a description coinciding with the definition of the claimed estate for years appears if the Examiner is to support his assertion that the Graff article discloses decompositions that involve estates for years other than leases, and Applicant asserts that the Examiner cannot do so. Furthermore, Applicant asserts that, when combined with the precisely defined term "remainder interest," as in "estate for years/remainder interest separation," the expression "estate for years" can only refer to a term of years equity interest. Because neither "remainder" nor "estate for years" nor any description corresponding to them appears in the Graff article, it follows that the Graff article does not disclose the temporal property decomposition of the interest as claimed herein.

Epstein adds nothing to the mix because it does not disclose the claimed *market-based valuation reflecting* an expected return under a performance scenario (italics added to highlight what the Examiner overlooked).

And further with no reason to even combine or modify the cited art, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

iv. As to claim 137, there also is no teaching of the claimed term of years interest.

As stated above, with regard to claim 133, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property. More particularly, there is no teaching of a

term of years interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole.*

A term of one thing is not a term of another, and it is fortunate that the Graff article did not make passing mention of a "term paper." The use of the word "term" on page 53 of Graff, which forms the basis for the Examiner's rejection, is in connection with the term of a lease. If anyone feels that the term of a lease is equivalent to a term of years, they can try to claim amortization of a lease in a tax filing to obtain a swift lesson from the IRS in the difference.

Contrary to the Examiner's assertion at page 35 of the Final Rejection, there is nothing in Graff about "determining at what prices it would be profitable to buy or sell a term of years interest in temporally decomposed property."

Epstein adds nothing to the mix because it does not disclose the claimed *market-based valuation reflecting* an expected return under a performance scenario (italics added to highlight what the Examiner overlooked).

And further with no reason to even combine or modify the cited art to reach the claimed invention, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

G. Incorporation by reference: C1, D1 and E1, and further, Ginsberg, Coughlan, Epstein, Official Notice, and art relied thereon are insufficient for *prima facie* obviousness because:

1. As to claims 68-75, 80-95, 112-115, and 230-257

a. No reason to combine or modify.

Problems with the Examiner's proposed combination / modification have already been pointed out above with regard to the other cited art, and adding another citation does not mitigate the previously mentioned problems. In addition to the discussion of C2, D1, F reasserted here. Note that C2 discusses the improper combination of Coughlan, D1 addresses

the improper combination of Ginsberg (and official notice citations) and Epstein; and F addresses the improper combination of Epstein. Permutations of these are discussed above, and all incorporated by reference here. Not previously addressed is the proposed combination of adding Coughlan to the mix.

There is no stated or apparent reason for combining or modifying Coughlan in a combination with the other nonanalogous cited art (Active LCD Technology, Analog Computing, a Decimal Point Or Comma Printing, a Digital Sine generator, an Optical-Digital Computer, the particular communications link disclosure of the '238) upon which the rejection is premised.

Coughlan teaches "a training module for midlevel bank people to help them quantify risk more accurately." This is not a teaching of a valuation. This is *a training module*. It does "simulations," according to Coughlan.

Coughlan says nothing about using this training module to do a valuation. Although Coughlan does mention "investments," one can "quantify risk" for investments without doing a valuation, for example, in evaluating risk in insurance investments. Coughlan mentions "quantify risk," but does not teach how one would do this in connection with a valuation.

And given the interest rate / hypothetical index and generic default-free non-expiring bonds of Ginsberg, no system appears to be imaginable that could handle both the Coughlan and Ginsberg approaches, especially to do the claimed element: market-based valuation in connection with property.

Moreover, the use of Coughlan's "a training module for midlevel bank people to help them quantify risk more accurately" is contradicted by Epstein's focus on duration. One cannot do the interest rate / hypothetical index and generic non-expiring bonds of Ginsberg, in combination with Coughlan's "a training module for midlevel bank people to help them quantify risk more accurately," in further combination with Epstein's use of duration in selecting bonds for a portfolio. These are unrelatable conflicting disclosures, made all the more unimaginable by trying

to combine them with the Active LCD Technology, Analog Computing, a Decimal Point Or Comma Printing, a Digital Sine generator, an Optical-Digital Computer, the particular communications link disclosure of the '238 patent. Indeed it is not apparent that anyone of any skill in any art would even be familiar with all these arts, let alone would have thought to combine them to reach Applicant's claimed invention. With contradicting disclosures in very different arts, the rejection premised upon the combination is improper, insufficient for *prima facie* obviousness, and must be reversed.

b. As to claims 68-71 and 230-233 there is no enabling disclosure for at least one security for corporate debt.

Ginsberg does mention "corporate bonds" at Col. 1, line 23, as one class of fixed income securities, and does state the following at Col. 1, lines 50-55, that:

> Treasuries have characteristic properties that make them especially useful for the purposes of the present invention and, therefore, are used exclusively in the following discussions, with the fundamental tenant that the principles may be applied to other types of fixed income securities without departing from the inventive concepts.

However, as the Examiner recognizes, "Ginsberg does not disclose taking a non-zero risk into account." See Ginsberg too at Col. 1, lines 56-60, that:

> One important attribute of treasuries, in the context of the present invention, is the minimal and uniform default risk; the issuance of U.S. government paper removes the default risk as a defining criteria in the relative pricing of treasuries in the market.

As Ginsberg does not mention how to handle "the default risk as a defining criteria," as the Examiner recognizes, Ginsberg does not provide a teaching that would enable one to make and use that which is the subject of the instant claims.

To place this in perspective, the Board can take notice of numerous corporate bond defaults such as that of Enron last year, which amounted to $9.9 billion (excluding bank credits and derivatives, of course). As per Ginsberg and the Examiner, such risk is a "defining criteria." It is respectfully submitted that no one having any skill in the art would desire or think

it obvious to try to realize a Ginsberg methodology that cannot handle things like multi-billion dollar defaults.

Corporate debt involves default risk, and the Examiner conceded in Paragraph 47 of the first Office Action that the valuation methodology in Ginsberg "reflects a risk-free rate in as much as Ginsberg does not disclose taking a non-zero risk into account." Accordingly, Ginsberg clearly does not disclose how to apply the Ginsberg invention to bonds with non-zero default risk, in particular corporate debt. Thus Ginsberg does not enable a method for valuing bonds that must involve default risk, e.g., corporate debt valuation.

It is respectfully submitted that Ginsberg does not provide an enabling disclosure for handling at least one security for corporate debt, and as apparently recognized by the Examiner. A *prima facie* case of obviousness has not been shown, and thus the rejection must be reversed. More to the point, the Examiner has not established that the cited art would have obviously enabled one with ordinary skill in the art to carry out Applicant's method.

c. As to claims 72-75 and 234-237 there is no enabling disclosure for corporate debt.

A security for corporate debt is not the same as corporate debt, which has no necessary relationship to securities, e.g., a bank loan can be a corporate debt. This is particularly clear when forming a valuation of one, e.g., contrast owning a bond with owning a bank loan.

As best as can be said about Ginsberg, this patent does mention "corporate bonds" at Col. 1, line 23, as one kind of fixed income securities, and does state the following at Col. 1, lines 50-55, that:

> Treasuries have characteristic properties that make them especially useful for the purposes of the present invention and, therefore, are used exclusively in the following discussions, with the fundamental tenant that the principles may be applied to other types of fixed income securities without departing from the inventive concepts.

However, as the Examiner recognizes, "Ginsberg does not disclose taking a non-zero risk into account." See Ginsberg too at Col. 1, lines 56-60, that:

> One important attribute of treasuries, in the context of the present invention, is the minimal and uniform default risk; the issuance of U.S. government paper removes the default risk as a defining criteria in the relative pricing of treasuries in the market.

As Ginsberg does not mention how to handle "the default risk as a defining criteria," as the Examiner recognizes, Ginsberg does not provide a teaching that would enable one to make and use that which is the subject of the instant claims.

To place this in perspective, the Board can take notice of numerous corporate bond defaults such as that of Enron last year, which amounted to $9.9 billion (excluding bank credits and derivatives, of course). As per Ginsberg and the Examiner, such risk is a "defining criteria." It is respectfully submitted that no one having any skill in the art would desire or think it obvious to try to realize a Ginsberg methodology that cannot handle things like multi-billion dollar defaults.

Corporate debt involves default risk, and the Examiner conceded in Paragraph 47 of the first Office Action that the valuation methodology in Ginsberg "reflects a risk-free rate in as much as Ginsberg does not disclose taking a non-zero risk into account." Accordingly, Ginsberg clearly does not disclose how to apply the Ginsberg invention to bonds with non-zero default risk, in particular corporate debt. Thus Ginsberg does not enable a method for valuing bonds that must involve default risk, e.g., corporate debt valuation.

It is respectfully submitted that Ginsberg does not provide an enabling disclosure for handling corporate debt, and as apparently recognized by the Examiner. A *prima facie* case of obviousness has not been shown, and thus the rejection must be reversed. More to the point, the Examiner has not established that the cited art would have obviously enabled one with ordinary skill in the art to carry out Applicant's method.

d. As to claims 80-83 and 242-245 there is no enabling disclosure for real estate.

The cited art of Ginsberg, Coughlan, and Epstein do not mention real estate or any method for generating a market-based valuation for... real estate as the property...

The Examiner takes official notice that real estate was previously known, and while Applicant never claimed to be the inventor of real estate, the Examiner has shown no prior art method for the claimed generating a market-based valuation for... real estate as the property... which is more to the point.

More particularly, the Examiner appears to believe that Applicant's method ... having a system determined purchase price for property in consummating a sale in connection with a valuation of ... real estate is obvious in view of a "training module for midlevel bank people" and a hypothetical portfolio for an interest rate index, using duration in bond selection, some nonanalogous art (re analog computers, etc.) in view of the prior existence of real estate.

Epstein, Coughlan, and Ginsberg do not mention real estate or any method, means, or idea in connection with performing a valuation of real estate nor any method ... having a system determined purchase price therefor. Nor is it easy to imagine how these teachings could handle a valuation of real estate as they seem to have nothing whatsoever to do with a valuation of real estate. In doing a market-based valuation, one must have the relevant market.

At page 31 of the Final Rejection, the claims are rejected because the Examiner contends that "real estate is well known." However, that alone is no evidence that any method for performing a valuation of real estate was also known. In rejecting the claims of this group, the Examiner has not cited any teaching of any method for performing a valuation of real estate. *Per se* this is not a *prima facie* case of obviousness.

The Examiner's reasoning is as follows.

> Real estate, like the Treasury notes of Ginsberg's patent, can be bought, sold, rented, etc. Hence it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to apply Ginsberg's method of valuing securities to real estate, for the obvious advantage of determining at what prices it would be profitable to buy or sell real estate.

See Final Rejection at page 31.

There is no motivation for this modification or suggestion whatsoever in the cited art, and as to the cited art for this group, the only suggestion of any method for performing a valuation of real estate as the property can be found in Applicant's claims. This kind of rejection is prohibited by *In re Lee; In re Rouffet; and In re Kotzab.*

Further, the Examiner has not shown how this modification plausibly could work (the invention can't be obvious based on an approach that does not work).

First, no one would value real estate in the manner of Ginsberg or like a Treasury. For example, the Ginsberg methodology computes a discount or premium from par and a true yield to maturity (Col. 3, lines 59-61), but trying to apply these to real estate is ludicrous. These have nothing to do with real estate.

Second, Ginsberg's index valuation is based on real time trading, and a real time index for real estate does not seem to be doable, not the least because real estate is not fungible (e.g., reflecting the uniqueness of real estate is the common phrase that the 3 main sources for real estate value are "location, location, location"). Accordingly, trading in unique things is very different from trading options or futures on stocks or sugar, etc.

Third, for trading at a financial exchange (as Ginsberg teaches), by law, one would need to register the Examiner's apparently implied real estate with either the SEC or CFTC. However, registering real estate has not been shown to be doable under the law.

Fourth, even assuming one can find a way to make real estate fungible for trading, and obtain SEC and CFTC registrations for trading options or futures on the real estate, the Examiner still must overcome the fact that Ginsberg's methodology applies to an

interest-rate index and a hypothetical portfolio of generic securities, not the claimed property of any sort, including real estate. The Examiner has proposed no idea of how Ginsberg could handle honest to goodness property in the place of his portfolio, which has not been shown and is clearly contrary to Ginsberg's teachings. If the Examiner can sidestep Ginsberg's intentional use of "hypothetical" and "generic" without contradicting Ginsberg's explicit teachings to the contrary, so as to handle honest to goodness property, then the Examiner must come up with some workable, reality-based system, and the Examiner has not explained how such a system could work. That is, the Examiner must explain plausibly how his purported obviousness modification of Ginsberg's interest-rate index and hypothetical portfolio of generic securities might have some workable embodiment in reality.

For example, the Examiner's apparently proposed reality-based real estate index valuation would be some sort of real time barometer of the real estate market, and the system inputs apparently would be analogous to Ginsberg's bids, asks, and trades but for real time trading of real estate, rather than for Treasury bills and notes. However, no such trading system has been shown to exist for real estate to provide such inputs into the methodology of Ginsberg—nor has the Examiner proposed how it could exist or even proposed any reason for it to exist. Indeed much of the information about real estate is not even publicly accessible, let alone accessible in Ginsberg's real time. The Examiner has made no showing of any real time trading of real estate (or even a reason for such a market) or how an embodiment could work so as to provide the input to Ginsberg's index valuation system.

Next, the Examiner has made no showing of how the Ginsberg output could work. Pursuant to Ginsberg, presumably a basket (Ginsberg) of real estate would be used to support futures trading on them through the financial exchanges (Ginsberg). But financial exchanges do not handle futures trading in real estate, as discussed above, and even assuming that the notion of an option or a future in real estate were to have some meaning

(and even this has not been shown), trading in them would be illegal without SEC or CFTC registration.

Whatever could come from what the Examiner contends is obvious is essentially unimaginable in reality. The unimaginable is not obvious. Ginsberg has essentially nothing to do with forming a valuation of real estate, and there is no possible reason to combine the cited teachings into anything meaningful, which the Examiner is required to do and has not done. Accordingly, there has been no showing of *prima facie* obviousness, and the rejection must be reversed.

Still further, at page 52, lines 5-14, of the Final Rejection, the Examiner asserts once more that "Graff teaches treating real estate as comprising a portfolio of debt instruments, making Ginsberg's methodology, or something quite similar, applicable to real estate." Applicant asserts that the Examiner's qualifier, "...or something quite similar...", is so vague and general as to invalidate the assertion, in view of the burden of proof on the PTO. How close does something have to be in the Examiner's opinion to qualify? Any legally binding answer clearly is impossible. The Examiner is leaving himself an indefinite loophole that he is asking Applicant to rebut without knowledge of what the loophole encompasses.

The Examiner also overstates once again the generality of Ginsberg's invention. Applicant observes once again that, as Examiner concedes in Paragraph 47 of the first Office Action, the valuation methodology in Ginsberg "reflects a risk-free rate in as much as Ginsberg does not disclose taking a non-zero risk into account." Accordingly, Ginsberg's invention only applies to Treasury securities, which (among other things) lack default risk and are interest-only fixed-income assets with par values and coupon rates. However, bonds are more general than Treasury securities. For example, all corporate and tax-exempt bonds have default risk, and many bonds are not interest-only. Furthermore, the Examiner overreaches again in asserting that "Graff teaches treating real estate as comprising a portfolio of debt instruments...."

Applicant denies that Graff teaches any such thing. The only mention in Graff's article relating real estate to bonds is an assertion that leases can be valued in a like manner to some kinds of bonds. However, these kinds of bonds do not include Treasury bonds, because the kinds of bonds to which Graff refers are not interest-only and accordingly do not have coupon rates, and further because these bonds are never default-free. It follows that the Examiner is incorrect in asserting that combining Ginsberg and Graff is obvious. Furthermore, the Examiner is incorrect in asserting that Graff shows how to value real estate like bonds because Graff explicitly points out (pages 50-51, left column) that there is a component of every real property that is not in the least bond-like. Accordingly, the Examiner is incorrect in asserting that "It is difficult to accept Applicant's expressed view that no one would value real estate in the manner of Ginsberg or like a Treasury when Graff is on record as doing so more than a year before Applicant's filing date." Thus the Examiner's rejection, especially of claims 80-83 is incorrect.

e. As to claims 84-87 and 246-250, the Examiner concedes that there is no teaching for property not including any securities.

The Examiner appears to believe that Applicant's method ... having a system determined purchase price for ...property not including securities is obvious in view of a "training module for midlevel bank people," the use of duration in selecting bonds for a portfolio, and a hypothetical portfolio for an interest rate index, in view of the prior existence of property not including any securities and the above mentioned non-analogous art (analog computers, etc.).

Epstein, Coughlan, and Ginsberg do not mention any method, means, or idea in connection with performing a valuation of property not including securities nor any method ... having a system determined purchase price therefor.

Neither is it easy to imagine how these teachings could handle a valuation of property not including securities as they seem to have nothing whatsoever to do with a

valuation of property not including securities.

For example, would one have a system determined purchase price for tangible personal property as the ...property not including securities? No, because as the Examiner points out in his reasons for allowability at pages 47-48:

> [N]either Ginsberg nor any other prior art of record discloses, teaches, or reasonably suggests generating the valuation for tangible personal property as the property, nor could this be easily combined with the method taught by Ginsberg, since, for example, the Ginsberg methodology computes a discount or premium from par and a true yield to maturity, which are inapplicable to cars, furniture, or other tangible personal property. Tangible personal property can be leased, and it would be possible to temporally decompose leased tangible personal property into an equity asset and a portfolio of debt instruments, by analogy to what Graff ("The Impact of Tax Issues on Real Estate Debt and Equity Separation") teaches doing for real estate; however, the mere potential of doing this does not make it obvious to do.

So if broad classes of property not including securities are not obvious over the cited art, why should any other kinds of property not including securities be obvious? The Examiner has made no attempt to explain his inconsistent arguments. All that can be understood is that the Examiner relies solely on the prior existence of property not including securities for some claims but not for others. See page 31 of the Final Rejection. However, the prior existence of anything does not teach a particular method for valuing it, especially with a system determined purchase price. In rejecting the claims of this group, the Examiner has not cited any teaching of any method for performing a valuation of property not including securities. *Per se* this is not a *prima facie* case of obviousness.

The Examiner's reasoning is as follows.

> Property not including securities, like the Treasury notes of Ginsberg's patent, can be bought, sold, rented, etc. (Real estate, cars, and furniture, for example, are fairly often rented and sold outright). Hence it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to apply Ginsberg's method of valuing securities to property not including securities, for the obvious advantage of determining at what prices it would be profitable to buy or sell property not including securities.

See Final Rejection at pages 31-32.

There is no motivation for this modification or suggestion whatsoever in the cited art, and as to the cited art for this group, the only suggestion of any method for performing a valuation of property not including securities can be found in Applicant's claims. This kind of rejection is prohibited by *In re Lee; In re Rouffet; and In re Kotzab.*

And contrast the above-quoted rejection rationale with the above-quoted reasons for allowance to appreciate the inconsistent reasoning in rejecting the instant claims.

Further, the Examiner has not shown how this modification plausibly could work (the invention can't be obvious based on an approach that does not work). First, no one would value property not including securities such as the Examiner's "real estate, cars, and furniture" in the manner of Ginsberg or like a Treasury. For example, the Ginsberg methodology computes a discount or premium from par and a true yield to maturity (Col. 3, lines 59-61), but trying to apply these to property not including securities such as the Examiner's "real estate, cars, and furniture" is ludicrous. See section C4a above regarding real estate.

Second, Ginsberg's index valuation is based on real time trading, and a real time index for property not including securities such as the Examiner's "real estate, cars, and furniture" does not seem to be doable, not the least because property not including securities such as the Examiner's "real estate, cars, and furniture" is not necessarily fungible (e.g., reflecting the uniqueness of real estate is the common phrase that the 3 main sources for real estate value are "location, location, location"). Accordingly, trading in unique things is very different from trading options or futures on stock or sugar, etc.

Third, for trading at a financial exchange (as Ginsberg teaches), by law, one would need to register the Examiner's apparently implied property not including securities such as the Examiner's "real estate, cars, and furniture" with either the SEC or CFTC. However, registering such things has not been shown to be doable under the law.

Fourth, even assuming that one can find a way to make property not including securities such as the Examiner's "real estate, cars, and furniture" fungible for trading, and obtain SEC and CFTC registrations for trading options or futures on the real estate, the Examiner still must overcome the fact that Ginsberg's methodology applies to an interest-rate index and a hypothetical portfolio of generic securities, not the claimed property of any sort, including property not including securities such as the Examiner's "real estate, cars, and furniture". The Examiner has proposed no idea of how Ginsberg could handle honest to goodness property in the place of his portfolio, which has not been shown and is clearly contrary to Ginsberg's teachings. If the Examiner can sidestep Ginsberg's intentional use of "hypothetical" and "generic" without contradicting Ginsberg's explicit teachings to the contrary, so as to handle honest to goodness property, then the Examiner must come up with some workable, reality-based system, and the Examiner has not explained how such a system could work. That is, the Examiner must explain plausibly how his purported obvious modification of Ginsberg's interest-rate index and hypothetical portfolio might have some workable embodiment in reality.

For example, the Examiner's apparently proposed reality-based property not including securities such as the Examiner's "real estate, cars, and furniture" index valuation would be some sort of real time barometer of the property not including securities such as the Examiner's "real estate, cars, and furniture" market, and the system inputs apparently would be analogous to Ginsberg's bids, asks, and trades but for real time trading of property not including securities such as the Examiner's "real estate, cars, and furniture", rather than for Treasury bills and notes. However, no such trading system has been shown to exist for property not including securities such as the Examiner's "real estate, cars, and furniture" to provide such inputs into the methodology of Ginsberg—nor has the Examiner proposed how it could exist or even proposed any reason for it to exist. Indeed, as of Applicant's priority date in 1992, much of the

information about such things as furniture has not been shown to have been publicly accessible in Ginsberg's real time. The Examiner has made no showing of any real time trading of property not including securities such as the Examiner's "real estate, cars, and furniture" (or even a reason for such a market) or how an embodiment could work so as to provide the input to Ginsberg's index valuation system.

Next, the Examiner has made no showing of how the Ginsberg output could work. Pursuant to Ginsberg, presumably a basket (Ginsberg) of property not including securities such as the Examiner's "real estate, cars, and furniture" would be used to support futures trading on them through the financial exchanges (Ginsberg). But financial exchanges do not handle futures trading in property not including securities such as the Examiner's "real estate, cars, and furniture", as discussed above, and even assuming that the notion of an option or a future in property not including securities such as the Examiner's "real estate, cars, and furniture" were to have some meaning (and even this has not been shown), trading in them would be illegal without SEC or CFTC registration.

Whatever could come from what the Examiner contends is obvious is essentially unimaginable in reality. The unimaginable is not obvious. Ginsberg has essentially nothing to do with forming a valuation of property not including securities such as the Examiner's "real estate, cars, and furniture", and there is no possible reason to combine the cited teachings into anything meaningful, which the Examiner is required to do and has not done. Accordingly, there has been no showing of *prima facie* obviousness, and the rejection must be reversed.

f. As to claims 92-95 and 255-257, there is no teaching of tax-exempt.

(1) Ginsberg's Treasury security is not tax-exempt.

Ginsberg is directed to a hypothetical portfolio of "generic" securities, and this is not considered tax-exempt because it is not even property. The hypothetical portfolio uses

hypothetical Treasuries, which are not real either, and therefore are not tax-exempt. And even if they were honest to goodness Treasuries, Treasuries are not considered tax-exempt securities either. Despite the Examiner's assertion to the contrary in trying to make out an obviousness case in the Final Rejection at pages 6 and 51, the Board is directed to see, e.g., Treasury regulation section 1.61-7(b)(3), which provides, in general, that interest on United States obligations issued after March 1, 1941, is fully taxable. Nor (of course) is there any tax exemption for hypothetical stuff. See "Fundamentals of Municipal Bonds," Public Securities Association, 1989, page 7:

> **THE FEDERAL TAX EXEMPTION**
>
> The principal characteristic that has traditionally set municipal securities apart from all other capital market securities is the federal tax exemption: the interest income on municipal bonds has historically been exempt from federal income tax. Evidence of the significance of this characteristic is reflected by the fact that municipal securities are often commonly referred to simply as "tax-exempt bonds."

See also "The Handbook of Fixed Income Securities," Frank J. Fabozzi, 5th Ed. (1997), page 161:

> The U.S. bond market can be divided into two major sectors; the taxable bond market and the tax-exempt bond market. The former sector includes bonds issued by the U.S. government, U.S. government agencies and sponsored enterprises, and corporations. The tax-exempt bond market is one in which the interest from bonds that are issued and sold is exempt from federal income taxation. Interest may or may not be taxable at the state and local level. The interest on U.S. Treasury securities is exempt from state and local taxes, but the distinction in classifying a bond as tax-exempt is the tax treatment at the federal income tax level.

Pursuant to the Treasury regulations and treatise views contrary to the Examiner's contention, the Examiner has not made out a *prima facie* case of obviousness concerning the tax-exempt requirement of the claims.

(2) Ginsberg does not enable municipal bonds as the tax-exempt.

Ginsberg does mention "municipal bonds" at Col. 1, line 23, as one kind of fixed

income securities and does state the following at Col. 1, lines 50-55, that:

> Treasuries have characteristic properties that make them especially useful for the purposes of the present invention and, therefore, are used exclusively in the following discussions, with the fundamental tenant that the principles may be applied to other types of fixed income securities without departing from the inventive concepts.

However, as the Examiner recognizes, "Ginsberg does not disclose taking a non-zero risk into account." See Ginsberg too at Col. 1, lines 56-60, that:

> One important attribute of treasuries, in the context of the present invention, is the minimal and uniform default risk; the issuance of U.S. government paper removes the *default risk as a defining criteria in the relative pricing* of treasuries in the market.

As Ginsberg does not mention how to handle "the default risk as a defining criteria," as the Examiner recognizes, Ginsberg does not provide a teaching that would enable one to make and use that which is the subject of the instant claims.

To place this in perspective, the Board can take notice of numerous municipal bond defaults such as that of Washington Public Power Supply System defaulting on $2.25 billion in bonds. As per Ginsberg and the Examiner, such risk is a "defining criteria." It is respectfully submitted that no one having any skill in the art would desire or think it obvious to try to realize a Ginsberg methodology that cannot handle things like multi-billion dollar defaults.

Municipal bonds involve default risk, and the Examiner conceded in Paragraph 47 of the first Office Action that the valuation methodology in Ginsberg "reflects a risk-free rate in as much as Ginsberg does not disclose taking a non-zero risk into account." Accordingly, Ginsberg clearly does not disclose how to apply the Ginsberg invention to bonds with non-zero default risk, in particular municipal bonds. Thus Ginsberg does not enable a method for valuing bonds that must involve default risk, e.g., municipal bond valuation.

It is respectfully submitted that Ginsberg does not provide an enabling disclosure for handling tax-exempt securities, and as apparently recognized by the Examiner. A *prima*

facie case of obviousness has not been shown, and thus the rejection must be reversed. More to the point, the Examiner has not established that the cited art would have obviously enable one with ordinary skill in the art to carry out Applicant's method.

(3) Summary.

In sum, Ginsberg's Treasury security is not tax-exempt, the Examiner has not shown that municipal bonds are enabled, and thus the Examiner has not made out a *prima facie* case of obviousness concerning the tax-exempt requirement of the claims in this group.

H. Incorporation by reference: A1, C1, and E1, and further, Ginsberg, Graff, Coughlan, Official Notice, and art relied thereon are insufficient for *prima facie* obviousness because:

1. As to claims 44, 148, 152-177

a. No reason to combine or modify.

Problems with the Examiner's proposed combination / modification have already been pointed out above with regard to the other cited art, and adding another citation does not mitigate the previously mentioned problems. The discussion of A1, C1, and E are reasserted here. Note that C1 discusses the improper combination of Coughlan; and E addresses the improper combination of Graff. Permutations of these are discussed above, and all are incorporated by reference here. Not previously addressed is the proposed combination of adding Coughlan to this particular mix.

The proposed combination of Ginsberg and Graff is incomprehensible to one having ordinary skill in the art--at the time of the invention and even today. Thus, no case of *prima facie* case of obviousness has been made out.

Examiner's Position

The Examiner's reason to combine Ginsberg and Graff is in the Final Rejection at pages 9-10:

Ginsberg does not disclose that the property does not include any securities;

however, it is well known to buy, sell, and analyze properties which are not securities by the usual meaning of the term, and Graff in particular teaches applying financial analysis to real estate related assets (see especially pages 51-52). Hence it would have been obvious to one of ordinary skill in the art of finance to apply the method of Ginsberg to property not including any securities, for the obvious advantage of determining the prices at which it would be expected to be profitable to buy or sell such property.

Applicant's Positions

The Examiner is correct that Ginsberg does not disclose that the property does not include any securities, especially because Ginsberg does not disclose an index system that handles any property; Ginsberg discloses an interest-rate index on a hypothetical portfolio of generic securities.

Though Ginsberg has not been shown to be modifiable to do what he rejected—handling honest to goodness property, the proposed combination is also improper for the reasons set out below.

(1) There is No Plausible Reason to Combine.

Ginsberg addresses a need for a real time barometer of the fixed income market with an interest-rate index and a hypothetical portfolio of "generic" securities, as discussed above regarding Group A. Graff pertains to leases and mortgages (see, e.g., page 52, second column, lines 13 and 18, respectively). Ginsberg and Graff have essentially nothing to do with each other, and the resulting notions of trading lease or mortgage options and futures is preposterous.

For example, speculating for a moment to try to make sense of the Examiner's idea of combining them, presumably there would be some sort of real time index of hypothetical (Ginsberg) leases and/or mortgages (Graff) to support futures and options trading at financial exchanges of baskets (Ginsberg) of leases and mortgages?! (Graff)

Such an idea is stupefying and so farfetched as to be surreal: certainly a plausible reason to combine has not been shown from the cited art. First, as to Ginsberg's

trading in view of Graff, a real time index for leases and mortgages does not seem to be doable not the least because they are not fungible (e.g., reflecting the uniqueness of real estate is the common phrase that the 3 main sources for real estate value are "location, location, location"). Accordingly, trading in options or futures in unique things is very different from trading options or futures on stocks or sugar, etc.

Second, for public options and futures trading at a financial exchange (as Ginsberg teaches), by law, one would need to register the Examiner's apparently implied lease or mortgage options or futures with either the SEC or CFTC. However, registering a lease or a mortgage option or future has not been shown to be doable under the law.

Third, even assuming that one can find a way to make leases and mortgages fungible for trading, and obtain SEC and CFTC registrations for trading options or futures on the financial exchanges for leases and mortgages, such publically traded futures and options have not been shown to have any meaning in the art. The Examiner is required to show that the concepts from his proposed combination had some meaning in the art the time of Applicant's priority date in 1992. In particular, in the context of public trading on a financial exchange and SEC or CFTC registration, (1) what is a future on a mortgage? (2) what is a future on a lease? (3) what is an option on a mortgage? and (4) what is an option on a lease? These would seem to be necessary prerequisites for the Examiner's proposed modification, as best as it can be understood, and these prerequisites have not been shown to have had any meaning to one having ordinary skill in the art at the time of the invention.

Fifth, if the Examiner can explain around the foregoing, the Examiner still must overcome the fact that Ginsberg's methodology applies to an interest-rate index and a hypothetical portfolio of generic securities, not the claimed property. The Examiner has some idea of how Ginsberg could handle honest to goodness property in the place of his portfolio, which has not been shown and is clearly contrary to Ginsberg's teachings. If the Examiner can

sidestep Ginsberg's intentional use of "hypothetical" and "generic" without contradicting Ginsberg's explicit teachings to the contrary, so as to handle honest to goodness property, then the Examiner must come up with some workable, reality-based system, and the Examiner has not explained how such a system could work. Graff's leases and mortgages, like Ginsberg's bonds, expire in time, so an index on any of them – other than in hypothetical terms – seems to make no sense. In time, the basis for any honest to goodness bond index will expire, just like the basis for any honest to goodness lease index would expire, just like an honest to goodness mortgage index would expire. Indeed, the problem posed by bond expiration apparently motivated Ginsberg's invention of the hypothetical portfolio of generic, default-free securities. The Examiner must explain plausibly how his purported obvious modification of Ginsberg's interest-rate index and hypothetical portfolio might have some workable embodiment in reality.

For example, apparently the Examiner's proposed reality-based (property) index valuation would be some sort of real time barometer (Ginsberg) for the lease and/or mortgage (Graff) market, and the system inputs apparently would be analogous to Ginsberg's bids, asks, and trades but for real time trading of leases and mortgages (Graff), rather than for Treasury bills and notes. However, no such trading system has been shown to exist for leases and mortgages to provide such inputs into the methodology of Ginsberg—nor has the Examiner proposed how it could exist or even proposed any reason for it to exist. Indeed much of the information about mortgages and leases is not even publicly accessible, let alone accessible in Ginsberg's real time. The Examiner has made no showing of any real time trading of leases or mortgages (or even a reason for such a market) or how an embodiment could work so as to provide the input to Ginsberg's index valuation system.

Next, the Examiner has made no showing of how the Ginsberg/Graff output could work. Pursuant to Ginsberg, presumably a basket (Ginsberg) of leases or mortgages (Graff) would be used to support futures trading on them through the financial exchanges

(Ginsberg). But financial exchanges do not handle futures trading in leases or mortgages, as discussed above, and even assuming that the notion of an option or a future in a lease or a mortgage were to have some meaning (and even this has not been shown), trading in them would be illegal without SEC or CFTC registration.

Whatever could come from the Examiner's proposed combination is essentially unimaginable in reality. Ginsberg and Graff have essentially nothing to do with each other, and there is no possible reason to combine their teachings into anything meaningful, which the Examiner is required to do and has not done; thus there has been no showing of *prima facie* obviousness.

The particulars of the Examiner's contention cannot be discerned from the vague explanation of a reason to combine, but the consequences of trying to combine Ginsberg and Graff are so surreal as to be unfathomable, as discussed above. Somehow the proposed combination must make sense in reality, and in the absence of a plausible reason to combine, no *prima facie* case of obviousness has been presented.

There is no stated or apparent reason for combining or modifying by adding Coughlan to the Graff / Ginsberg mix, in a combination with the other nonanalogous cited art (Active LCD Technology, Analog Computing, a Decimal Point Or Comma Printing, a Digital Sine generator, an Optical-Digital Computer, the particular communications link disclosure of the '238) upon which the rejection is premised.

Coughlan teaches "a training module for midlevel bank people to help them quantify risk more accurately." This is not a teaching of a valuation. This is *a training module.* It does "simulations," according to Coughlan.

Coughlan says nothing about using this training module to do a valuation. Although Coughlan does mention "investments," one can "quantify risk" for investments without doing a valuation, for example, in evaluating risk in insurance investments. Coughlan mentions

"quantify risk," but does not teach how one would do this in connection with a valuation.

And given the interest rate / hypothetical index and generic non-expiring bonds of Ginsberg, no system appears to be imaginable that could handle both the Coughlan and Ginsberg approaches, especially to do the claimed element: market-based valuation in connection with property.

b. There is no teaching of the claimed valuation reflecting... a quantitative description of risk.

(1) No teaching...

Coughlan mentions Lotus 1-2-3 add-ins in connection with "a training module for midlevel bank people to help them quantify risk more accurately." This is not a teaching of a valuation. This is *a training module.* It does "simulations," according to Coughlan.

Coughlan says nothing about using this training module to do a valuation. Although Coughlan does mention "investments," one can "quantify risk" for investments without doing a valuation, for example, in evaluating risk in insurance investments. Coughlan mentions "quantify risk," but does not teach how one would do this in connection with a valuation.

Like Coughlan, Ginsberg does not teach the claimed valuation reflecting... a quantitative description of risk either, as conceded by the Examiner in the Final Rejection at page 16. Because neither of them teach it, and none of the other cited art mentions it, no combination of them can teach it. Thus, there is no *prima facie* case of obviousness.

And given the interest rate / hypothetical index and generic non-expiring bonds of Ginsberg, no system appears to be imaginable that could do the instant claimed element: market-based valuation reflecting... a quantitative description of risk in connection with property.

(2) No reason to combine as to this claim element.

It is implausible that the S&P would utilize any numerical indication of how risky the index is, as for example, "...the S&P was up 137 points today in active trading, but the S&P

reflects 20% risk..." based on Lotus 1-2-3 add-ins in a training module for midlevel bank people. Similarly, it is implausible that the Dow would do so with its index. It is equally implausible that a bond / interest rate index, like Ginsberg, would do the same. The Examiner's proposed reason is not credible.

Indeed, there is no risk indication in connection with an index, like the S&P. Indexes such as the S&P are only snapshots markets. It would be difficult to imagine a better way to destroy an index than to somehow use a quantitative description of risk to blur the present market snapshot with future uncertainty. If ever there were a case where the proposed combination would destroy the intent, purpose, and function of the cited art, this is it. The combination and modification proposed by the Examiner is extraneous to, and would completely undermine the value of, any "barometer of the market."

The Examiner attempts to explain that it would have made sense to one having ordinary skill in the art for the index data to have reflected the risk for "obtaining usable estimates of the risks in purchasing an item of property." But again, in the first financial analysis output of Ginsberg, neither an interest-rate index nor a "hypothetical portfolio" is property.

Coughlan's mention of "quantify risk" is in connection with a training module—which has nothing to do with an index--nothing. Ginsberg's hypothetical portfolio has nothing to do with training midlevel bank people—nothing. Coughlan's "training module for midlevel bank people" has nothing to do with Ginsberg or with the claimed invention, and the proposed combination would destroy the respective intent, purpose, and functions of each, e.g., to form a risky index for training midlevel bank people. Furthermore, the Examiner has not explained how a valuation could be carried out with a quantitative description of risk without contradicting the Ginsberg purpose of a providing a barometer of the market.

Note too that Coughlan states that the Lotus 1-2-3 add-ins "could be used by anyone making risk decisions." However, outputting index data (Ginsberg) is not a risk *decision.*

There is no decision in outputting index data, and thus there is no context for a risk in the first financial analysis output of Ginsberg. There is no plausible reason to combine offered by the Examiner so that the first financial analysis (index output data) would include a valuation reflecting... a quantitative description of risk for property. Even if one could find some way to combine them, together they do not teach the claimed: valuation reflecting... a quantitative description of risk especially in connection with property. Accordingly, there has been no showing of a *prima facie* case of obviousness.

c. As to claim 44, incorporate by reference as set forth in A1 and E1.

There is no proper reason to combine the cited art. As explained in C1, which is incorporated by reference, the combination of Ginsberg and Coughlan is prohibited because the teachings contradict the Examiner's proposed combination / modification. A contradiction cannot be removed by adding more material, so the addition of Graff to the combination of Ginsberg and Coughlan is also a prohibited combination. See *In re Gordon.* Accordingly, the rejection must be reversed.

2. As to Claims 148-152, there is no teaching of a component of temporally decomposed property.

A component of one thing is not the same as a component of another, especially when it comes to forming a valuation, and statutory patentability does not depend on what the Examiner happens to think is a distinction without a difference. In this particular case, the Examiner's view is the sole voice contrary to that of those having ordinary skill in the art, as evidenced by IRS rulings, Treasury regulations, and federal court decisions.

As for the Examiner's assertion "that Graff teaches the temporal decomposition of property into components, some of which are similar to corporate bonds...", the record shows that Applicant's Specification and its predecessor specifications are the first teachings of temporal decomposition of property. See the response to the first Office Action and in

paragraphs 11-14: The Graff article teaches nothing about the temporal decomposition of property, because the Graff article never addresses this subject.

Initially, the Examiner contended that Graff teaches "the temporal decomposition of property." Graff discloses decomposing of property *benefits* into a lease and a leased fee, but this is not a temporal decomposition – or any decomposition of the property – because the owner of the fee owns the property. The owner of the property never surrenders any property rights in Graff; the lease owner merely receives some economic benefits. To decompose the property, one must break up ownership somehow.

Note that although Graff mentions "fee simple property ownership is separated temporally into term and residual property ownership, with term ownership running until existing leases expire and residual ownership commencing when the leases expire" at page 53, second column, lines 21-25 (and does not mention "remainder"), the statement is set in a context with a different meaning than inferred by the Examiner. This is clear because Graff states that "the functional equivalent of term ownership can readily be created in a single tenant-property by an appropriate form of master lease on the facility coincident with the term of the existing lease. The term owner is the holder of the master lease; the residual equity holder is the legal owner of the property while the master lease is in force." Page 53, second column, lines 28-35. This is not a decomposition of property ownership, but instead is a decomposition of economic benefits.

The Examiner apparently agrees and retrenches his legal position at page 52 of the Final Rejection:

> Applicant argues... that Graff does not teach a temporal decomposition of property, but rather of economic benefits. Given that the decomposition taught by Graff is temporal, this is held to be a distinction without a difference.

But IRS rulings, Treasury regulations, and federal court decisions are all contrary to the Examiner's opinion of what is "a distinction without a difference." Thus, if the Examiner

were to take this position in an IRS filing, he could wind up penalized for filing a frivolous tax return. For authority contrary to the Examiner's opinion, see

1. Treasury Regulation 1.1014-5c, Example 5.
2. Internal Revenue Code Revenue Ruling 62-132

   cite: 1962-2c.b.73
3. Manufacturers Hanover Trust Company vs. Commissioner

   cite: 431f.2d 664 (Second Circuit 1970)

By contrast, other authorities make the tax treatment of carved-out lease interests unclear. Authorities for this are the following:

4. Ellison vs. Commissioner

   cite: 80TC 378 (1983)
5. Bryant vs. Commissioner

   cite 399f.2d 800

Contrary to the Examiner's opinion of what is "a distinction without a difference," the Tax Code views the respective processes and the resulting components differently. Furthermore, the code encourages the courts and the IRS to look through formal legal structure to economic substance to determine tax treatment. Accordingly, differences in the tax perspectives establishes that those having ordinary skill in the art view the two processes as having different substance. Because various tax authorities make the tax treatment of term and remainder property interests different from the tax treatment of separated economic benefits, the Examiner's view to the contrary is inexplicable, unsustainable, and far from the standards for determining obviousness set forth by the U.S. Supreme Court in *Graham v. John Deere Co.*, 383 U.S. 1 (1966). The Examiner has not shown (and in view of contrary tax authority cannot show) why one having ordinary skill in the art would have turned to Graff re decomposition of economic benefits for a methodology for decomposition of property.

The Examiner's rejection based on his view of "a distinction without a difference," contrary to the IRS, Treasury, and case law, falls short of a case of *prima facie* obviousness, and the rejection must be reversed.

a. As to claims 149-152

(1) As to claim 149 there also is no teaching of the claimed remainder interest.

As stated above, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property. More particularly, there is no teaching of a remainder interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

The Board's attention is drawn to the Final Rejection, page 52, line 20-page 53, line 12. At page 52, lines 10-12, the Examiner asserts that "merely because Graff does not use the term 'remainder' (in the Graff article) does not mean that Graff does not disclose the substance of a remainder interest."

The Board is requested to take Official Notice of the plain and ordinary meaning of the word, for example in a law dictionary, to see that the word "remainder" refers to a particular type of property interest, whereas the word "residual" refers to a more general type of property interest. See, e.g., "Law Dictionary," 3rd Ed., Steven H. Gifis, 1991 (roughly contemporary with the priority date of the instant patent application), pages 408-409, enclosed. Because the terms have distinct and different precise legal meanings, the Examiner's quoted assertion (and ground of rejection) is incorrect in the assertion unless he can find a description of the claimed property interest in the Graff article that coincides with the legal definition of a remainder interest, and Applicant asserts that the Examiner cannot satisfy this requirement.

Accordingly, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

(2) As to claim 150 there also is no teaching of the claimed equity interest in a remainder interest.

As stated above, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property. More particularly, there is no teaching of an equity interest in a remainder interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

The Examiner concedes that there is no disclosure of an equity interest in a remainder interest and relies solely on the prior existence of equity interests to imagine equity interest in a remainder interest in further imagining that it would be obvious to do the particularly claimed method ... having a system determined purchase price for the equity interest in a remainder interest.

Respectfully, the Examiner is just making up things. Nothing in the art or Office Action mentions an equity interest in a remainder interest. Nothing indicates how to do a valuation of one either. Based on the art of record, no one would have any idea of Applicant's invention, let alone be enabled to practice the claimed invention.

The Examiner has cited art of equity interests in other things, e.g., shares of stock in a corporation and equity interests in non-incorporated partnerships, in the Final Rejection, at page 34. None of these involve the claimed remainder interest.

Further, Applicant required references to support the Official Notice, and the Examiner's additional citations do not show the claimed remainder interest. The only mention in the record of equity interest in a remainder interest is in the claims. With this in mind, the Examiner's case is a long way from showing any method of valuing one.

And further with no reason to even combine or modify the cited art, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

(3) As to claim 151 there also is no teaching of the claimed estate for years interest.

As stated above, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property. More particularly, there is no teaching of an estate for years interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

The Board's attention is drawn to page 53, lines 10-12, of the Final Rejection wherein the Examiner asserts that the expression "estate for years" is equivalent to the "portfolio of debt instruments" in the Graff article, although "estate for years" does not appear in the Graff article. The "portfolio of debt instruments" in the Graff article can only be interpreted as a portfolio of leases based on the context of the Graff article, as discussed above with regard to claim 118. By contrast, "estate for years" is well defined in real estate law.

Again, because "estate for years" does not appear in the Graff article, the Examiner must show where in the Graff article a description coinciding with the definition of the claimed estate for years appears if the Examiner is to support his assertion that the Graff article discloses decompositions that involve estates for years other than leases, and Applicant asserts that the Examiner cannot do so. Furthermore, Applicant asserts that, when combined with the precisely defined term "remainder interest," as in "estate for years/remainder interest separation," the expression "estate for years" can only refer to a term of years equity interest. Because neither "remainder" nor "estate for years" nor any description corresponding to them appears in the Graff article, it follows that the Graff article does not disclose the temporal property decomposition of the interest as claimed herein.

And further with no reason to even combine or modify the cited art, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

(4) As to claim 152 there also is no teaching of the claimed term of years interest.

As stated above, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property. More particularly, there is no teaching of a term of years interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

A term of one thing is not a term of another, and it is fortunate that the Graff article did not make passing mention of a "term paper." The use of the word "term" on page 53 of Graff, which forms the basis for the Examiner's rejection, is in connection with the term of a lease. If anyone feels that the term of a lease is equivalent to a term of years, they can try to claim amortization of a lease in a tax filing to obtain a swift lesson from the IRS in the difference.

Contrary to the Examiner's assertion at page 35 of the Final Rejection, there is nothing in Graff about "determining at what prices it would be profitable to buy or sell a term of years interest in temporally decomposed property."

And further with no reason to even combine or modify the cited art to reach the claimed invention, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

3. As to claims 153-157, the Examiner's contentions regarding fractional are not completely understood, but are traversed.

And as pointed out above, Graff does not teach temporally decomposed property. Therefore, Graff does not teach a species of a component of temporally decomposed property. Therefore, Graff does not teach a fractional interest in a component of temporally decomposed property. Therefore, Graff does not teach or suggest any method for valuing one either.

The Examiner relies on Official Notice of stocks (at page 42 of the Final Rejection) as evidence that fractional interests in corporations was known. In response it is noted that the prior existence of a fractional interest in one thing (corporations) is not the same as a fractional interest in another thing (a component of temporally decomposed property) and methods to value each of them are not the same either. The record shows no method of generating a valuation of a component of temporally decomposed property suggested anywhere other than in Applicant's patent application.

Applicant does not claim to be the first to conceive of a fractional interest. However, it is respectfully submitted that no one would have thought of a means for valuing a fractional interest in a remainder of property from the master lease, etc. discussion in Graff. More so, the IRS has long recognized a significant difference exists between valuations of fractional interests in liquid assets and illiquid assets. For example, for gift tax purposes, the IRS allows a discount in the valuation of a minority fractional interest in an illiquid asset (such as a remainder interest) from the value obtained by multiplying the fraction of the fractional interest by the value of the illiquid asset, but does not allow the discount in the case of a liquid asset. Therefore the Examiner's contention that fractional interests were well known does not imply that valuation of the fractional interests was well known from Graff. Therefore, the Examiner's conclusions based thereon are incorrect. Furthermore, the Examiner asserts that there was an "obvious advantage of pricing and trading interests smaller and more conveniently purchasable than the whole value of the remainder interest." Because there has been no showing any trading of such smaller interests in remainder interests, there has been no showing that any such advantage was known to exist before Applicant's invention—and certainly not that any such advantage was obvious.

The Examiner has failed *prima facie* showing of the claim as a whole, and the rejection must therefore be reversed.

a. As to claims 154-157

(1) As to claim 154 there also is no teaching of the claimed remainder interest.

As stated above, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property, i.e., a fractional interest. More particularly, there is no teaching of a remainder interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole.*

The Board's attention is drawn to the Final Rejection, page 52, line 20-page 53, line 12. At page 52, lines 10-12, the Examiner asserts that "merely because Graff does not use the term 'remainder' (in the Graff article) does not mean that Graff does not disclose the substance of a remainder interest."

The Board is requested to take Official Notice of the plain and ordinary meaning of the word, for example in a law dictionary, to see that the word "remainder" refers to a particular type of property interest, whereas the word "residual" refers to a more general type of property interest. See, e.g., "Law Dictionary," 3rd Ed., Steven H. Gifis, 1991 (roughly contemporary with the priority date of the instant patent application), pages 408-409, enclosed. Because the terms have distinct and different precise legal meanings, the Examiner's quoted assertion (and ground of rejection) is incorrect in the assertion unless he can find a description of the claimed property interest in the Graff article that coincides with the legal definition of a remainder interest, and Applicant asserts that the Examiner cannot satisfy this requirement.

Accordingly, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

(2) As to claim 155 there also is no teaching of the claimed equity interest in a remainder interest.

As stated above, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally

decomposed property, i.e., a fractional interest. More particularly, there is no teaching of an equity interest in a remainder interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

The Examiner concedes that there is no disclosure of an equity interest in a remainder interest and relies solely on the prior existence of equity interests to imagine equity interest in a remainder interest in further imagining that it would be obvious to do the particularly claimed method ... having a system determined purchase price for the equity interest in a remainder interest.

Respectfully, the Examiner is just making up things. Nothing in the art or Office Action mentions an equity interest in a remainder interest. Nothing indicates how to do a valuation of one either. Based on the art of record, no one would have any idea of Applicant's invention, let alone be enabled to practice the claimed invention.

The Examiner has cited art of equity interests in other things, e.g., shares of stock in a corporation and equity interests in non-incorporated partnerships, in the Final Rejection, at page 34. None of these involve the claimed remainder interest.

Further, Applicant required references to support the Official Notice, and the Examiner's additional citations do not show the claimed remainder interest. The only mention in the record of equity interest in a remainder interest is in the claims. With this in mind, the Examiner's case is a long way from showing any method of valuing one.

And further with no reason to even combine or modify the cited art, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

(3) As to claim 156 there also is no teaching of the claimed estate for years interest.

As stated above, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally

decomposed property, i.e., a fractional interest. More particularly, there is no teaching of an estate for years interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

The Board's attention is drawn to page 53, lines 10-12, of the Final Rejection wherein the Examiner asserts that the expression "estate for years" is equivalent to the "portfolio of debt instruments" in the Graff article, although "estate for years" does not appear in the Graff article. The "portfolio of debt instruments" in the Graff article can only be interpreted as a portfolio of leases based on the context of the Graff article, as discussed above with regard to claim 118. By contrast, "estate for years" is well defined in real estate law.

Again, because "estate for years" does not appear in the Graff article, the Examiner must show where in the Graff article a description coinciding with the definition of the claimed estate for years appears if the Examiner is to support his assertion that the Graff article discloses decompositions that involve estates for years other than leases, and Applicant asserts that the Examiner cannot do so. Furthermore, Applicant asserts that, when combined with the precisely defined term "remainder interest," as in "estate for years/remainder interest separation," the expression "estate for years" can only refer to a term of years equity interest. Because neither "remainder" nor "estate for years" nor any description corresponding to them appears in the Graff article, it follows that the Graff article does not disclose the temporal property decomposition of the interest as claimed herein.

And further with no reason to even combine or modify the cited art, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

(4) As to claim 157 there also is no teaching of the claimed term of years interest.

As stated above, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally

decomposed property, i.e., a fractional interest. More particularly, there is no teaching of a term of years interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

A term of one thing is not a term of another, and it is fortunate that the Graff article did not make passing mention of a "term paper." The use of the word "term" on page 53 of Graff, which forms the basis for the Examiner's rejection, is in connection with the term of a lease. If anyone feels that the term of a lease is equivalent to a term of years, they can try to claim amortization of a lease in a tax filing to obtain a swift lesson from the IRS in the difference.

Contrary to the Examiner's assertion at page 35 of the Final Rejection, there is nothing in Graff about "determining at what prices it would be profitable to buy or sell a term of years interest in temporally decomposed property."

And further with no reason to even combine or modify the cited art to reach the claimed invention, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

4. As to claims 158-162, there is no teaching of a second member of the group.

a. No reason to combine.

The Examiner concedes that Ginsberg does not teach a second member of the group at page 30 of the Final Rejection. The Examiner there contends that because a valuation reflective of a quantitative description of risk is shown by Coughlan, it would have been obvious to combine them "for the obvious advantage of obtaining usable estimates of the risks involved in purchasing an item of property." (See Final Rejection at page 30, lines 13-14.)

But Ginsberg's hypothetical portfolio of generic securities is not property, and no one is purchasing the hypothetical portfolio, so the Examiner's reason to combine has the same

gaping hole as the rest of the rejection for all claims. But further, what is Ginsberg's index output? Is it a "real time barometer of the fixed-income market" as Ginsberg teaches or an estimate of the risks involved in purchasing an item of property, as the Examiner contends. These are mutually exclusive in the context of Ginsberg. A barometer (or snapshot) is focussed on the present and "risks in purchasing" is directed to the future. Thus, a valuation of the hypothetical portfolio of generic securities for Ginsberg's interest-rate index cannot reflect the two members of the group.

In sum, the Examiner's proposed reason to combine is not credible and therefore fails in attempting to make out a *prima facie* rejection; the rejection must be reversed.

5. As to claims 159-162

a. As to claim 159 there also is no teaching of the claimed remainder interest.

As stated above, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property, especially not involving a second member of the group. In this context, more particularly, there is no teaching of a remainder interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole.*

The Board's attention is drawn to the Final Rejection, page 52, line 20-page 53, line 12. At page 52, lines 10-12, the Examiner asserts that "merely because Graff does not use the term 'remainder' (in the Graff article) does not mean that Graff does not disclose the substance of a remainder interest."

The Board is requested to take Official Notice of the plain and ordinary meaning of the word, for example in a law dictionary, to see that the word "remainder" refers to a particular type of property interest, whereas the word "residual" refers to a more general type of property interest. See, e.g., "Law Dictionary," 3rd Ed., Steven H. Gifis, 1991 (roughly

contemporary with the priority date of the instant patent application), pages 408-409, enclosed. Because the terms have distinct and different precise legal meanings, the Examiner's quoted assertion (and ground of rejection) is incorrect in the assertion unless he can find a description of the claimed property interest in the Graff article that coincides with the legal definition of a remainder interest, and Applicant asserts that the Examiner cannot satisfy this requirement.

Accordingly, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

b. As to claim 160 there also is no teaching of the claimed equity interest in a remainder interest.

As stated above, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property, especially not involving a second member of the group. In this context, more particularly, there is no teaching of an equity interest in a remainder interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

The Examiner concedes that there is no disclosure of an equity interest in a remainder interest and relies solely on the prior existence of equity interests to imagine equity interest in a remainder interest in further imagining that it would be obvious to do the particularly claimed method ... having a system determined purchase price for the equity interest in a remainder interest.

Respectfully, the Examiner is just making up things. Nothing in the art or Office Action mentions an equity interest in a remainder interest. Nothing indicates how to do a valuation of one either. Based on the art of record, no one would have any idea of Applicant's invention, let alone be enabled to practice the claimed invention.

The Examiner has cited art of equity interests in other things, e.g., shares of stock in a corporation and equity interests in non-incorporated partnerships, in the Final

Rejection, at page 34. None of these involve the claimed remainder interest.

Further, Applicant required references to support the Official Notice, and the Examiner's additional citations do not show the claimed remainder interest. The only mention in the record of equity interest in a remainder interest is in the claims. With this in mind, the Examiner's case is a long way from showing any method of valuing one.

And further with no reason to even combine or modify the cited art, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

c. As to claim 161 there also is no teaching of the claimed estate for years interest.

As stated above, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property, especially not involving a second member of the group. In this context, more particularly, there is no teaching of an estate for years interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole.*

The Board's attention is drawn to page 53, lines 10-12, of the Final Rejection wherein the Examiner asserts that the expression "estate for years" is equivalent to the "portfolio of debt instruments" in the Graff article, although "estate for years" does not appear in the Graff article. The "portfolio of debt instruments" in the Graff article can only be interpreted as a portfolio of leases based on the context of the Graff article, as discussed above with regard to claim 118. By contrast, "estate for years" is well defined in real estate law.

Again, because "estate for years" does not appear in the Graff article, the Examiner must show where in the Graff article a description coinciding with the definition of the claimed estate for years appears if the Examiner is to support his assertion that the Graff article discloses decompositions that involve estates for years other than leases, and Applicant asserts that the Examiner cannot do so. Furthermore, Applicant asserts that, when combined

with the precisely defined term "remainder interest," as in "estate for years/remainder interest separation," the expression "estate for years" can only refer to a term of years equity interest. Because neither "remainder" nor "estate for years" nor any description corresponding them appears in the Graff article, it follows that the Graff article does not disclose the temporal property decomposition of the interest as claimed herein.

And further with no reason to even combine or modify the cited art, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

d. As to claim 162 there also is no teaching of the claimed term of years interest.

As stated above, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property, especially not involving a second member of the group. In this context, more particularly, there is no teaching of a term of years interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

A term of one thing is not a term of another, and it is fortunate that the Graff article did not make passing mention of a "term paper." The use of the word "term" on page 53 of Graff, which forms the basis for the Examiner's rejection, is in connection with the term of a lease. If anyone feels that the term of a lease is equivalent to a term of years, they can try to claim amortization of a lease in a tax filing to obtain a swift lesson from the IRS in the difference.

Contrary to the Examiner's assertion at page 35 of the Final Rejection, there is nothing in Graff about "determining at what prices it would be profitable to buy or sell a term of years interest in temporally decomposed property."

And further with no reason to even combine or modify the cited art to reach the claimed invention, the Examiner has failed to make out a case of *prima facie* obviousness, and

the rejection must be reversed.

6. As to claims 163-167, the Examiner's contentions regarding fractional are not understood, and therefore are traversed.

As pointed out above, Graff does not teach temporally decomposed property. Therefore, Graff does not teach a species of a component of temporally decomposed property. Therefore, Graff does not teach a fractional interest in a component of temporally decomposed property. Therefore, Graff does not teach or suggest any method for valuing one either.

The Examiner relies on Official Notice of stocks (at page 42 of the Final Rejection) as evidence that fractional interests in corporations was known. In response it is noted that the prior existence of a fractional interest in one thing (corporations) is not the same as a fractional interest in another thing (a component of temporally decomposed property) and methods to value each of them are not the same either. The record shows no method of generating a valuation of a component of temporally decomposed property suggested anywhere other than in Applicant's patent application.

Applicant does not claim to be the first to conceive of a fractional interest. However, it is respectfully submitted that no one would have thought of a means for valuing a fractional interest in a remainder of property from the master lease, etc. discussion in Graff. More so, the IRS has long recognized a significant difference exists between valuations of fractional interests in liquid assets and illiquid assets. For example, for gift tax purposes, the IRS allows a discount in the valuation of a minority fractional interest in an illiquid asset (such as a remainder interest) from the value obtained by multiplying the fraction of the fractional interest by the value of the illiquid asset, but does not allow the discount in the case of a liquid asset. Therefore the Examiner's contention that fractional interests were well known does not imply that valuation of the fractional interests was well known from Graff. Therefore, the Examiner's conclusions based thereon are incorrect. Furthermore, the Examiner asserts that

there was an "obvious advantage of pricing and trading interests smaller and more conveniently purchasable than the whole value of the remainder interest." Because there has been no showing any trading of such smaller interests in remainder interests, there has been no showing that any such advantage was known to exist before Applicant's invention—and certainly not that any such advantage was obvious.

The Examiner has failed *prima facie* showing of the claim as a whole, and the rejection must therefore be reversed.

a. As to claim 164 there also is no teaching of the claimed remainder interest.

As stated above, with regard to claim 163, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property. More particularly, there is no teaching of a remainder interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole.*

The Board's attention is drawn to the Final Rejection, page 52, line 20-page 53, line 12. At page 52, lines 10-12, the Examiner asserts that "merely because Graff does not use the term 'remainder' (in the Graff article) does not mean that Graff does not disclose the substance of a remainder interest."

The Board is requested to take Official Notice of the plain and ordinary meaning of the word, for example in a law dictionary, to see that the word "remainder" refers to a particular type of property interest, whereas the word "residual" refers to a more general type of property interest. See, e.g., "Law Dictionary," 3rd Ed., Steven H. Gifis, 1991 (roughly contemporary with the priority date of the instant patent application), pages 408-409, enclosed. Because the terms have distinct and different precise legal meanings, the Examiner's quoted assertion (and ground of rejection) is incorrect in the assertion unless he can find a description

of the claimed property interest in the Graff article that coincides with the legal definition of a remainder interest, and Applicant asserts that the Examiner cannot satisfy this requirement.

Accordingly, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

b. As to claim 165 there also is no teaching of the claimed equity interest in a remainder interest.

As stated above, with regard to claim 163, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property. More particularly, there is no teaching of an equity interest in a remainder interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

The Examiner concedes that there is no disclosure of an equity interest in a remainder interest and relies solely on the prior existence of equity interests to imagine equity interest in a remainder interest in further imagining that it would be obvious to do the particularly claimed method ... having a system determined purchase price for the equity interest in a remainder interest.

Respectfully, the Examiner is just making up things. Nothing in the art or Office Action mentions an equity interest in a remainder interest. Nothing indicates how to do a valuation of one either. Based on the art of record, no one would have any idea of Applicant's invention, let alone be enabled to practice the claimed invention.

The Examiner has cited art of equity interests in other things, e.g., shares of stock in a corporation and equity interests in non-incorporated partnerships, in the Final Rejection, at page 34. None of these involve the claimed remainder interest.

Further, Applicant required references to support the Official Notice, and the Examiner's citations do not show the claimed remainder interest. The only mention in the

record of equity interest in a remainder interest is in the claims. With this in mind, the Examiner's case is a long way from showing any method of valuing one.

And further with no reason to even combine or modify the cited art, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

c. As to claim 166, there also is no teaching of the claimed estate for years interest.

As stated above, with regard to claim 163, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property. More particularly, there is no teaching of an estate for years interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

The Board's attention is drawn to page 53, lines 10-12, of the Final Rejection wherein the Examiner asserts that the expression "estate for years" is equivalent to the "portfolio of debt instruments" in the Graff article, although "estate for years" does not appear in the Graff article. The "portfolio of debt instruments" in the Graff article can only be interpreted as a portfolio of leases based on the context of the Graff article, as discussed above with regard to claim 118. By contrast, "estate for years" is well defined in real estate law.

Again, because "estate for years" does not appear in the Graff article, the Examiner must show where in the Graff article a description coinciding with the definition of the claimed estate for years appears if the Examiner is to support his assertion that the Graff article discloses decompositions that involve estates for years other than leases, and Applicant asserts that the Examiner cannot do so. Furthermore, Applicant asserts that, when combined with the precisely defined term "remainder interest," as in "estate for years/remainder interest separation," the expression "estate for years" can only refer to a term of years equity interest. Because neither "remainder" nor "estate for years" nor any description corresponding to them

appears in the Graff article, it follows that the Graff article does not disclose the temporal property decomposition of the interest as claimed herein.

And further with no reason to even combine or modify the cited art, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

d. As to claim 167 there also is no teaching of the claimed term of years interest.

As stated above, with regard to claim 163, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property. More particularly, there is no teaching of a term of years interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

A term of one thing is not a term of another, and it is fortunate that the Graff article did not make passing mention of a "term paper." The use of the word "term" on page 53 of Graff, which forms the basis for the Examiner's rejection, is in connection with the term of a lease. If anyone feels that the term of a lease is equivalent to a term of years, they can try to claim amortization of a lease in a tax filing to obtain a swift lesson from the IRS in the difference.

Contrary to the Examiner's assertion at page 35 of the Final Rejection, there is nothing in Graff about "determining at what prices it would be profitable to buy or sell a term of years interest in temporally decomposed property."

And further with no reason to even combine or modify the cited art to reach the claimed invention, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

7. As to claims 168-172, there is no teaching of risk free.

The Examiner contends, for example in the Final Rejection at page 30, that

"Ginsberg discloses by implication that the valuation reflects a risk-free rate, in as much as Ginsberg does not disclose taking a non-zero risk into account."

First, Ginsberg's not disclosing how to take a non-zero risk into account does not disclose how to take a risk-free rate into account.

Second, the Examiner has misconstrued the meaning of risk free rate. The Examiner has equated Ginsberg's interest rates on default-free generic bonds with Applicant's claimed risk free rate. This is not the correct meaning of the claim requirement, and the Board is requested to take notice of the plain and ordinary meanings of risk-free rate and risk-free asset, as indicated for example in Investments, by William Sharpe, Gordon Alexander and Jeffrey Bailey, Fifth Edition, 1995. A copy of Chapter 9 of Investments is enclosed. As can there be seen, the meanings of the terms "risk-free rate" and "risk-free asset" arise within the context of a one-period investment model. The investment period length is a predetermined time interval. Asset prices at the beginning of the investment period are assumed to be known by investors, and investors are assumed to have expectations about investment returns from all assets at the beginning of the investment period. In particular, every investor is assumed to associate an expected return with each asset.

The models identify investment risk mathematically with investor uncertainty at the beginning of the period about investment outcomes. Nearly all assets are risky in this sense, because actual returns that will be generated by assets during the period are usually not known by investors at the beginning of the period. Accordingly, the actual returns usually will not turn out to be the returns expected by investors at the beginning of the period. These assets are known as risky assets.

In this context, a risk-free asset is an exceptional kind of asset: one for which the actual return is known by investors with certainty at the beginning of the investment period. Because one-period models equate uncertainty about outcomes with investment risk, absence

of uncertainty corresponds to absence of investment risk: hence, the expression "risk-free asset."

A risk-free rate is the expected return associated with a risk-free asset. It is well known from investment theory that there can be at most one risk-free rate associated with a given investment holding period.

For example, in the enclosed Chapter 9 of Investments, by William Sharpe, Gordon Alexander and Jeffrey Bailey, Fifth Edition, 1995, there is a discussion of risk-free asset and risk-free rate, and from p. 233 of Chapter 9:

Because a risk-free asset has by definition a certain return, this type of asset must be some kind of fixed-income security with no possibility of default. As all corporate securities in principle have some chance of default, the risk-free asset cannot be issued by a corporation. Instead it must be a security issued by the federal government. However, not just any security issued by the U.S. Treasury qualifies as a risk-free security.

This leaves only one type of Treasury security to qualify as a risk-free asset: a Treasury security with a maturity that matches the length of the investor's (expected) holding period. For example, (if the length of the investment period) is three months, investors ... would find that a Treasury bill with a three-month maturity date had a certain return.

Sharpe et al. also teaches on pp. 245-248 that a risk-free rate is the expected return associated with a risk-free asset.

The Examiner asserts erroneously that all Treasury securities are risk-free. However, Sharpe et al. further teaches that "risk-free" does not simply equate with default-free: among other things, it encompasses that the maturity of the security equals the expected length of the investment period.

Absence of investment uncertainty also implies no uncertainty due to returns on future reinvestment of coupons. It follows that a risk-free asset is a Treasury bill or a Treasury

strip, i.e., a zero-coupon fixed-income asset as indicated in Applicant's invention disclosure.

Therefore, the Examiner has erroniously equated risk-free rate with Ginsberg's interest rates on default-free generic bonds, which is not the meaning of the claimed requirement, as would be understood by those having ordinary skill in the art.

In sum, the Examiner has failed to show that Ginsberg teaches the claimed risk-free rate and therefore fails in attempting to make out a *prima facie* rejection; the rejection must be reversed.

a. As to claim 169 there also is no teaching of the claimed remainder interest.

As stated above, with regard to claim 168, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property. More particularly, there is no teaching of a remainder interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

The Board's attention is drawn to the Final Rejection, page 52, line 20-page 53, line 12. At page 52, lines 10-12, the Examiner asserts that "merely because Graff does not use the term 'remainder' (in the Graff article) does not mean that Graff does not disclose the substance of a remainder interest."

The Board is requested to take Official Notice of the plain and ordinary meaning of the word, for example in a law dictionary, to see that the word "remainder" refers to a particular type of property interest, whereas the word "residual" refers to a more general type of property interest. See, e.g., "Law Dictionary," 3rd Ed., Steven H. Gifis, 1991 (roughly contemporary with the priority date of the instant patent application), pages 408-409, enclosed. Because the terms have distinct and different precise legal meanings, the Examiner's quoted assertion (and ground of rejection) is incorrect in the assertion unless he can find a description

of the claimed property interest in the Graff article that coincides with the legal definition of a remainder interest, and Applicant asserts that the Examiner cannot satisfy this requirement.

Accordingly, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

b. As to claim 170 there also is no teaching of the claimed equity interest in a remainder interest.

As stated above, with regard to claim 168, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property. More particularly, there is no teaching of an equity interest in a remainder interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

The Examiner concedes that there is no disclosure of an equity interest in a remainder interest and relies solely on the prior existence of equity interests to imagine equity interest in a remainder interest in further imagining that it would be obvious to do the particularly claimed method ... having a system determined purchase price for the equity interest in a remainder interest.

Respectfully, the Examiner is just making up things. Nothing in the art or Office Action mentions an equity interest in a remainder interest. Nothing indicates how to do a valuation of one either. Based on the art of record, no one would have any idea of Applicant's invention, let alone be enabled to practice the claimed invention.

The Examiner has cited art of equity interests in other things, e.g., shares of stock in a corporation and equity interests in non-incorporated partnerships, in the Final Rejection, at page 34. None of these involve the claimed remainder interest.

Further, Applicant required references to support the Official Notice, and the Examiner's citations do not show the claimed remainder interest. The only mention in the

record of equity interest in a remainder interest is in the claims. With this in mind, the Examiner's case is a long way from showing any method of valuing one.

And further with no reason to even combine or modify the cited art, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

c. As to claim 171 there also is no teaching of the claimed estate for years interest.

As stated above, with regard to claim 168, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property. More particularly, there is no teaching of an estate for years interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole.*

The Board's attention is drawn to page 53, lines 10-12, of the Final Rejection wherein the Examiner asserts that the expression "estate for years" is equivalent to the "portfolio of debt instruments" in the Graff article, although "estate for years" does not appear in the Graff article. The "portfolio of debt instruments" in the Graff article can only be interpreted as a portfolio of leases based on the context of the Graff article, as discussed above with regard to claim 118. By contrast, "estate for years" is well defined in real estate law.

Again, because "estate for years" does not appear in the Graff article, the Examiner must show where in the Graff article a description coinciding with the definition of the claimed estate for years appears if the Examiner is to support his assertion that the Graff article discloses decompositions that involve estates for years other than leases, and Applicant asserts that the Examiner cannot do so. Furthermore, Applicant asserts that, when combined with the precisely defined term "remainder interest," as in "estate for years/remainder interest separation," the expression "estate for years" can only refer to a term of years equity interest. Because neither "remainder" nor "estate for years" nor any description corresponding to them

appears in the Graff article, it follows that the Graff article does not disclose the temporal property decomposition of the interest as claimed herein.

And further with no reason to even combine or modify the cited art, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

d. As to claim 172 there also is no teaching of the claimed term of years interest.

As stated above, with regard to claim 168, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property. More particularly, there is no teaching of a term of years interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

A term of one thing is not a term of another, and it is fortunate that the Graff article did not make passing mention of a "term paper." The use of the word "term" on page 53 of Graff, which forms the basis for the Examiner's rejection, is in connection with the term of a lease. If anyone feels that the term of a lease is equivalent to a term of years, they can try to claim amortization of a lease in a tax filing to obtain a swift lesson from the IRS in the difference.

Contrary to the Examiner's assertion at page 35 of the Final Rejection, there is nothing in Graff about "determining at what prices it would be profitable to buy or sell a term of years interest in temporally decomposed property."

And further with no reason to even combine or modify the cited art to reach the claimed invention, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

8. As to claims 173-177, the Examiner's contentions regarding fractional are not understood, and therefore are traversed.

As pointed out above, Graff does not teach temporally decomposed property.

Therefore, Graff does not teach a species of a component of temporally decomposed property. Therefore, Graff does not teach a fractional interest in a component of temporally decomposed property. Therefore, Graff does not teach or suggest any method for valuing one either.

The Examiner relies on Official Notice of stocks (at page 42 of the Final Rejection) as evidence that fractional interests in corporations was known. In response it is noted that the prior existence of a fractional interest in one thing (corporations) is not the same as a fractional interest in another thing (a component of temporally decomposed property) and methods to value each of them are not the same either. The record shows no method of generating a valuation of a component of temporally decomposed property suggested anywhere other than in Applicant's patent application.

Applicant does not claim to be the first to conceive of a fractional interest. However, it is respectfully submitted that no one would have thought of a means for valuing a fractional interest in a remainder of property from the master lease, etc. discussion in Graff. More so, the IRS has long recognized a significant difference exists between valuations of fractional interests in liquid assets and illiquid assets. For example, for gift tax purposes, the IRS allows a discount in the valuation of a minority fractional interest in an illiquid asset (such as a remainder interest) from the value obtained by multiplying the fraction of the fractional interest by the value of the illiquid asset, but does not allow the discount in the case of a liquid asset. Therefore the Examiner's contention that fractional interests were well known does not imply that valuation of the fractional interests was well known from Graff. Therefore, the Examiner's conclusions based thereon are incorrect. Furthermore, the Examiner asserts that there was an "obvious advantage of pricing and trading interests smaller and more conveniently purchasable than the whole value of the remainder interest." Because there has been no showing any trading of such smaller interests in remainder interests, there has been no showing that any such advantage was known to exist before Applicant's invention—and

certainly not that any such advantage was obvious.

The Examiner has failed *prima facie* showing of the claim as a whole, and the rejection must therefore be reversed.

a. As to claims 174-177

(1) As to claim 174 there also is no teaching of the claimed remainder interest.

As stated above, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property, especially not involving a fractional interest. In this context, more particularly, there is no teaching of a remainder interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole.*

The Board's attention is drawn to the Final Rejection, page 52, line 20-page 53, line 12. At page 52, lines 10-12, the Examiner asserts that "merely because Graff does not use the term 'remainder' (in the Graff article) does not mean that Graff does not disclose the substance of a remainder interest."

The Board is requested to take Official Notice of the plain and ordinary meaning of the word, for example in a law dictionary, to see that the word "remainder" refers to a particular type of property interest, whereas the word "residual" refers to a more general type of property interest. See, e.g., "Law Dictionary," 3rd Ed., Steven H. Gifis, 1991 (roughly contemporary with the priority date of the instant patent application), pages 408-409, enclosed. Because the terms have distinct and different precise legal meanings, the Examiner's quoted assertion (and ground of rejection) is incorrect in the assertion unless he can find a description of the claimed property interest in the Graff article that coincides with the legal definition of a remainder interest, and Applicant asserts that the Examiner cannot satisfy this requirement.

Accordingly, the Examiner has failed to make out a case of *prima facie*

obviousness, and the rejection must be reversed.

(2) As to claim 175 there also is no teaching of the claimed equity interest in a remainder interest.

As stated above, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property, especially not involving a fractional interest. In this context, more particularly, there is no teaching of an equity interest in a remainder interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

The Examiner concedes that there is no disclosure of an equity interest in a remainder interest and relies solely on the prior existence of equity interests to imagine equity interest in a remainder interest in further imagining that it would be obvious to do the particularly claimed method ... having a system determined purchase price for the equity interest in a remainder interest.

Respectfully, the Examiner is just making up things. Nothing in the art or Office Action mentions an equity interest in a remainder interest. Nothing indicates how to do a valuation of one either. Based on the art of record, no one would have any idea of Applicant's invention, let alone be enabled to practice the claimed invention.

The Examiner has cited art of equity interests in other things, e.g., shares of stock in a corporation and equity interests in non-incorporated partnerships, in the Final Rejection, at page 34. None of these involve the claimed remainder interest.

Further, Applicant required references to support the Official Notice, and the Examiner's additional citations do not show the claimed remainder interest. The only mention in the record of equity interest in a remainder interest is in the claims. With this in mind, the Examiner's case is a long way from showing any method of valuing one.

And further with no reason to even combine or modify the cited art, the Examiner

has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

(3) As to claim 176 there also is no teaching of the claimed estate for years interest.

As stated above, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property, especially not involving a fractional interest. In this context, more particularly, there is no teaching of an estate for years interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole*.

The Board's attention is drawn to page 53, lines 10-12, of the Final Rejection wherein the Examiner asserts that the expression "estate for years" is equivalent to the "portfolio of debt instruments" in the Graff article, although "estate for years" does not appear in the Graff article. The "portfolio of debt instruments" in the Graff article can only be interpreted as a portfolio of leases based on the context of the Graff article, as discussed above with regard to claim 118. By contrast, "estate for years" is well defined in real estate law.

Again, because "estate for years" does not appear in the Graff article, the Examiner must show where in the Graff article a description coinciding with the definition of the claimed estate for years appears if the Examiner is to support his assertion that the Graff article discloses decompositions that involve estates for years other than leases, and Applicant asserts that the Examiner cannot do so. Furthermore, Applicant asserts that, when combined with the precisely defined term "remainder interest," as in "estate for years/remainder interest separation," the expression "estate for years" can only refer to a term of years equity interest. Because neither "remainder" nor "estate for years" nor any description corresponding to them appears in the Graff article, it follows that the Graff article does not disclose the temporal property decomposition of the interest as claimed herein.

And further with no reason to even combine or modify the cited art, the Examiner

has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

(4) As to claim 177 there also is no teaching of the claimed term of years interest.

As stated above, there is no teaching of a component of temporally decomposed property. Thus there can be no teaching of a species of the component of temporally decomposed property, especially not involving a fractional interest. In this context, more particularly, there is no teaching of a term of years interest. Nor are there any teachings to suggest obviousness of the claims respectively *as a whole.*

A term of one thing is not a term of another, and it is fortunate that the Graff article did not make passing mention of a "term paper." The use of the word "term" on page 53 of Graff, which forms the basis for the Examiner's rejection, is in connection with the term of a lease. If anyone feels that the term of a lease is equivalent to a term of years, they can try to claim amortization of a lease in a tax filing to obtain a swift lesson from the IRS in the difference.

Contrary to the Examiner's assertion at page 35 of the Final Rejection, there is nothing in Graff about "determining at what prices it would be profitable to buy or sell a term of years interest in temporally decomposed property."

And further with no reason to even combine or modify the cited art to reach the claimed invention, the Examiner has failed to make out a case of *prima facie* obviousness, and the rejection must be reversed.

I. Incorporation by reference: A1, C, D, E and F, and further, Ginsberg, Graff, Coughlan, Epstein, Official Notice, and art relied thereon are insufficient for *prima facie* obviousness because:

1. As to claims 178-180, there is no reason to combine.

The discussions of A1, C, D1, E, and F are reasserted here. Problems with the Examiner's proposed combination / modification have already been pointed out above with regard

to the other cited art, and adding another citation does not mitigate the previously mentioned problems. Note that A discusses Ginsberg; C2 discusses the improper combination of Coughlan, D1 addresses the improper combination of Ginsberg (and official notice citations) and Epstein; and E and F addresses the improper combination of Graff. Permutations of these are discussed above, and all incorporated by reference here. Not previously addressed is the proposed combination of all together: a whopping total of upwards of 10 art citations spanning fixed income securities, analog computing, training modules for a bank, LCD technology, real estate, decimal point printing, duration for bond portfolio selections, a digital sine generator, Lotus 1-2-3 add-ins, an optical computer, and a particular communications link, apparently all combined for reasons suggested in the art and obvious to one of whatever art spans these and the claimed invention.

As has often been said, the evidence speaks for itself. This is a completely uncombinable mess, and the fact that the Examiner resorts to such an absurdly broad range of art itself verges on proof of non-obviousness.

The proposed combination of Ginsberg and Graff alone is incomprehensible to one having ordinary skill in the art--at the time of the invention and even today. Thus, no case of *prima facie* case of obviousness has been made out.

Examiner's Position

The Examiner's reason to combine Ginsberg and Graff is in the Final Rejection at pages 9-10:

> Ginsberg does not disclose that the property does not include any securities; however, it is well known to buy, sell, and analyze properties which are not securities by the usual meaning of the term, and Graff in particular teaches applying financial analysis to real estate related assets (see especially pages 51-52). Hence it would have been obvious to one of ordinary skill in the art of finance to apply the method of Ginsberg to property not including any securities, for the obvious advantage of determining the prices at which it would be expected to be profitable to buy or sell such property.

Applicant's Positions

The Examiner is correct that Ginsberg does not disclose that the property does not include any securities, especially because Ginsberg does not disclose an index system that handles any property; Ginsberg discloses an interest-rate index on a hypothetical portfolio of generic securities.

Though Ginsberg has not been shown to be modifiable to do what he rejected — handling honest to goodness property — the proposed combination is also improper for the reasons set out below.

a. There is No Plausible Reason to Combine.

Ginsberg addresses a need for a real time barometer of the fixed income market with an interest-rate index and a hypothetical portfolio of "generic" securities, as discussed above regarding Group A. Graff pertains to leases and mortgages (see, e.g., page 52, second column, lines 13 and 18, respectively). Ginsberg and Graff have essentially nothing to do with each other, and the resulting notions of trading lease or mortgage options and futures is preposterous.

For example, speculating for a moment to try to make sense of the Examiner's idea of combining them, presumably there would be some sort of real time index of hypothetical (Ginsberg) leases and/or mortgages (Graff) to support futures and options trading at financial exchanges of baskets (Ginsberg) of leases and mortgages?! (Graff)

Such an idea is stupefying and so farfetched as to be surreal: certainly a plausible reason to combine has not been shown from the cited art. First, as to Ginsberg's trading in view of Graff, a real time index for leases and mortgages does not seem to be doable not the least because they are not fungible (e.g., reflecting the uniqueness of real estate is the common phrase that the 3 main sources for real estate value are "location, location, location"). Accordingly, trading in options or futures in unique things is very different from trading options

or futures on stocks or sugar, etc.

Second, for public options and futures trading at a financial exchange (as Ginsberg teaches), by law, one would need to register the Examiner's apparently implied lease or mortgage options or futures with either the SEC or CFTC. However, registering a lease or a mortgage option or future has not been shown to be doable under the law.

Third, even assuming that one can find a way to make leases and mortgages fungible for trading, and obtain SEC and CFTC registrations for trading options or futures on the financial exchanges for leases and mortgages, such publically traded futures and options have not been shown to have any meaning in the art. The Examiner is required to show that the concepts from his proposed combination had some meaning in the art the time of Applicant's priority date in 1992. In particular, in the context of public trading on a financial exchange and SEC or CFTC registration, (1) what is a future on a mortgage? (2) what is a future on a lease? (3) what is an option on a mortgage? and (4) what is an option on a lease? These would seem to be necessary prerequisites for the Examiner's proposed modification, as best as it can be understood, and these prerequisites have not been shown to have had any meaning to one having ordinary skill in the art at the time of the invention.

Fifth, if the Examiner can explain around the foregoing, the Examiner still must overcome the fact that Ginsberg's methodology applies to an interest-rate index and a hypothetical portfolio of generic securities, not the claimed property. The Examiner has some idea of how Ginsberg could handle honest to goodness property in the place of his portfolio, which has not been shown and is clearly contrary to Ginsberg's teachings. If the Examiner can sidestep Ginsberg's intentional use of "hypothetical" and "generic" without contradicting Ginsberg's explicit teachings to the contrary, so as to handle honest to goodness property, then the Examiner must come up with some workable, reality-based system, and the Examiner has not explained how such a system could work. Graff's leases and mortgages, like Ginsberg's

bonds, expire in time, so an index on any of them — other than in hypothetical terms — seems to make no sense. In time, the basis for any honest to goodness bond index will expire, just like the basis for any honest to goodness lease index would expire, just like an honest to goodness mortgage index would expire. Indeed, the problem posed by bond expiration apparently motivated Ginsberg's invention of the hypothetical portfolio of generic, default-free securities. The Examiner must explain plausibly how his purported obvious modification of Ginsberg's interest-rate index and hypothetical portfolio might have some workable embodiment in reality.

For example, apparently the Examiner's proposed reality-based (property) index valuation would be some sort of real time barometer (Ginsberg) for the lease and/or mortgage (Graff) market, and the system inputs apparently would be analogous to Ginsberg's bids, asks, and trades but for real time trading of leases and mortgages (Graff), rather than for Treasury bills and notes. However, no such trading system has been shown to exist for leases and mortgages to provide such inputs into the methodology of Ginsberg—nor has the Examiner proposed how it could exist or even proposed any reason for it to exist. Indeed much of the information about mortgages and leases is not even publicly accessible, let alone accessible in Ginsberg's real time. The Examiner has made no showing of any real time trading of leases or mortgages (or even a reason for such a market) or how an embodiment could work so as to provide the input to Ginsberg's index valuation system.

Next, the Examiner has made no showing of how the Ginsberg/Graff output could work. Pursuant to Ginsberg, presumably a basket (Ginsberg) of leases or mortgages (Graff) would be used to support futures trading on them through the financial exchanges (Ginsberg). But financial exchanges do not handle futures trading in leases or mortgages, as discussed above, and even assuming that the notion of an option or a future in a lease or a mortgage were to have some meaning (and even this has not been shown), trading in them

would be illegal without SEC or CFTC registration.

Whatever could come from the Examiner's proposed combination is essentially unimaginable in reality. Ginsberg and Graff have essentially nothing to do with each other, and there is no possible reason to combine their teachings into anything meaningful, which the Examiner is required to do and has not done; thus there has been no showing of *prima facie* obviousness.

The particulars of the Examiner's contention cannot be discerned from the vague explanation of a reason to combine, but the consequences of trying to combine Ginsberg and Graff are so surreal as to be unfathomable, as discussed above. Somehow the proposed combination must make sense in reality, and in the absence of a plausible reason to combine, no *prima facie* case of obviousness has been presented.

There is no stated or apparent reason for combining or modifying by adding Coughlan to the Graff / Ginsberg mix, in a combination with the other nonanalogous cited art (Active LCD Technology, Analog Computing, a Decimal Point Or Comma Printing, a Digital Sine generator, an Optical-Digital Computer, the particular communications link disclosure of the '238) upon which the rejection is premised.

Coughlan teaches "a training module for midlevel bank people to help them quantify risk more accurately." This is not a teaching of a valuation. This is *a training module.* It does "simulations," according to Coughlan.

Coughlan says nothing about using this training module to do a valuation. Although Coughlan does mention "investments," one can "quantify risk" for investments without doing a valuation, for example, in evaluating risk in insurance investments. Coughlan mentions "quantify risk," but does not teach how one would do this in connection with a valuation.

And given the interest rate / hypothetical index and generic non-expiring bonds of Ginsberg, no system appears to be imaginable that could handle both the Coughlan and Ginsberg

approaches, especially to do the claimed element: market-based valuation in connection with property.

Moreover, the use of Coughlan's "a training module for midlevel bank people to help them quantify risk more accurately" is contradicted by Epstein's focus on duration. One cannot do the interest rate / hypothetical index and generic non-expiring bonds of Ginsberg, in combination with Coughlan's "a training module for midlevel bank people to help them quantify risk more accurately," in further combination with Epstein's use of duration in selecting bonds for a portfolio. These are unrelatable conflicting disclosures, made all the more unimaginable by trying to combine them with the Active LCD Technology, Analog Computing, a Decimal Point Or Comma Printing, a Digital Sine generator, an Optical-Digital Computer, the particular communications link disclosure of the '238 patent. Indeed it is not apparent that anyone of any skill in any art would even be familiar with all these arts, let alone would have thought to combine them to reach Applicant's claimed invention. Pursuant to In re Bell, which held that "a prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art," the PTO has not met its burden to prove that Applicant's invention is obvious, and in the absence of *prima facie* obviousness, the rejection must be reversed.

(1). As to claim 179, further, there is no teaching of a component of another property.

Incorporating by reference A1, C1, D1, and E1, and as more particularly pointed out in C1, the combination of Ginsberg and Coughlan is prohibited because the teachings contradict the Examiner's proposed combination / modification. A contradiction cannot be removed by adding more material, so the addition of Graff and Epstein to the combination of Ginsberg and Coughlan is also a prohibited combination. See *In re Gordon.* Accordingly, the rejection must be reversed.

Moreover the Examiner asserts at page 46 of the Final Rejection that "Graff teaches having a property be a component of an other property..." However, Graff teaches no such thing. As per E2a, Graff discloses decomposing of property *benefits* into a lease and a leased fee. This is not a decomposition of the property, because the owner of the fee owns the property in fee simple. The owner of the property never surrenders any property rights in Graff; the lease owner merely receives some economic benefits. To teach "having a property be a component of another property," one must teach breaking up ownership somehow. Because Graff does not teach breaking up ownership, the Examiner's assertion is incorrect. Accordingly, the Examiner has not made out a *prima facie* case of obviousness, and the rejection must be reversed.

J. There is no apparent ground of rejection for claims 238-241, and it is believed that the rejection is a PTO mistake.

In the Final Rejection at page 47, the Examiner states: "Claims 226-257 are closely parallel to claims 64-95, respectively, and rejected on the same grounds." However, within the range of claims 64-95 are claims 76-79, which were allowed.

In the Final Rejection at page 47, the Examiner states: "ALLOWABLE SUBJECT MATTER Claims 76-79 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims."

As Claims 76-79 are within the range of claims 64-95, the former having been objected to, but now allowed, the rejection of the "closely parallel" corresponding claims appears to be an error. At least, there is no apparent ground for rejection for claims 238-241.

However, if there be any need to argue for reversal of these claims, the foregoing arguments of Groups A-H are restated here with equal force. Further, the Examiner's reasons for allowability at pages 47-48 of the Final Rejection of the "closely parallel" claims 76-

79 are repeated here as follows:

[N]either Ginsberg nor any other prior art of record discloses, teaches, or reasonably suggests generating the valuation for tangible personal property as the property, nor could this be easily combined with the method taught by Ginsberg, since, for example, the Ginsberg methodology computes a discount or premium from par and a true yield to maturity, which are inapplicable to cars, furniture, or other tangible personal property. Tangible personal property can be leased, and it would be possible to temporally decompose leased tangible personal property into an equity asset and a portfolio of debt instruments, by analogy to what Graff ("The Impact of Tax Issues on Real Estate Debt and Equity Separation") teaches doing for real estate; however, the mere potential of doing this does not make it obvious to do.

It seems that the rejection of the claims in this group is simply a PTO mistake, and in any case, no ground of rejection is apparent, no *prima facie* case of obviousness has been made, and the rejection must be reversed.

K. Other Issues

First, Applicant does not concede that Ginsberg, Epstein, Coughlan, or any art within one year prior to Applicant's priority date constitutes "prior art." Instead, the U.S. Patent and Trademark Office has not met its burden of proving unpatentability with the cited art.

Second, in the Final Rejection conclusion, the Examiner contends that prior art made of record and not relied upon is considered pertinent. Applicant reasserts the section on non-analogous art in group A again here with equal force. Further, Applicant does not concede that anything dated within one year of Applicant's priority date is "prior art."

Third, it is again noted that certain claims herein have been left in multiple dependent form for the convenience of the U.S. Patent and Trademark Office. As stated previously in the prosecution of this case, upon allowance, the claims will be amended into separate form, i.e., individual claims.

Fourth, at page 53 of the Final Rejection, lines 20-page 54, line 3: the Examiner states:

> In view of Applicant's lengthy and repetitive arguments, Examiner has not attempted to dispute Applicant's position regarding each claim at length and in detail.

The Examiner fails to note that the Applicant was essentially forced into this posture by the repetitive and lengthy first Office Action, which spanned 48 pages of so many misunderstandings and inconsistencies that clarification was required – and Applicant did so in an Amendment and Response that was shorter than the first Office Action. The Final Rejection was even longer, largely repeating the earlier Office Action — without taking note of most of the arguments in Applicant's response — in rejecting claims for little plausible reason or even no reason whatsoever, e.g., claims 238-241. Applicant paid the PTO fees and is entitled to the examination that was paid for.

Applicant appreciates the Examiner's efforts and that this is a jumbo case and apologizes for the length of this brief, which was not an undertaking Applicant relished. While the examination process has had the consequence of requiring articulation of a number of important and sometimes subtle issues, Applicant strongly disagrees with the conclusions concerning unpatentability, including the issues raised in the Office Action and repeated in the Final Rejection, which now necessarily must be carried forward to this Brief.

X. Conclusion

The invention is directed to a particular method of making certain financial analysis output with digital electrical computer means. In one embodiment, the method steps include producing a system-generated purchase price and an offering document in connection with consummating a sale of at least one security. In a multi-computer embodiment, method steps include controlling a first computer in generating output including a first valuation for property, communicating some output to a second computer, which uses that output in producing a second valuation. The valuations, typically market-based valuations, may differ in that the first usually reflects at least one from a group consisting of expected return under a performance scenario, a price, and a quantitative description of risk; in some claims, the second valuation involves

computation of a current market-based yield/discount rate. Both valuations pertain to the same property, and depending on the claim, the property can be a tax-exempt security, a portfolio of tax-exempt securities, a property not including any securities, a fixed-income asset, a portfolio of fixed-income assets, real estate, and tangible personal property. (Those claims pertaining to the tangible personal property have been allowed.)

The claims have been rejected based on Ginsberg, the central citation, in combination with sometimes upwards of 10 citations.

> "A prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art."

In re Bell, 991 F.2d 781, 782, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) (quoting *In re Rinehart*, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976)).

When making a determination concerning obviousness, all limitations of the claim must be evaluated. 35 U.S.C. Sec. 103, *In re Miller*, 418 F.2d 1392, 64 USPQ 46 (CCPA 1969).

Ginsberg, the central citation, does not even teach the claimed one market-based valuation of property, let alone a second market-based valuation of that property, more so all the claimed particulars that relate thereto.

Further, there must be some logical reason apparent from the record that would justify modification of the reference. *In re Royal,* 188 USPQ 132 (CCPA 1975).

The rejections rely on sometimes upwards of 10 citations of wildly different and often non-analogous art, such as analog computing and a fixed income index, a sine generator and real estate leases, stitched together improperly on an element-by-element basis. Sometimes, no reason for the rejection is provided at all.

If the Examiner fails to establish a prima facie case, the rejection is improper and will be overturned. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

It is respectfully submitted that all pending claims and the aforesaid groups of claims have not been shown to be unpatentable over the cited art, and thus, should be allowed.

Favorable action is therefore respectfully requested.

Respectfully submitted,

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XI. Appendix

1. A method for making a second financial analysis output having a second computed market-based valuation for property, the financial analysis output being made by steps including:

controlling a digital electrical computer processor to manipulate electrical signals in generating a market-based valuation for the property, wherein the property is from a group consisting of a tax-exempt security and a portfolio of tax-exempt securities, the market-based valuation reflecting at least one from a group consisting of expected return under a performance scenario, a price, and a quantitative description of risk, as part of a financial analysis output;

electronically communicating at least some of the financial analysis output as input to a second digital electrical computer having a second programmed processor, the second digital electrical computer storing the input in memory accessible to the second programmed processor;

generating the second market-based valuation reflecting computation of a current market-based yield/discount rate for the property with the second digital electrical computer and the input; and

generating the second financial analysis output, including the second market-based valuation, at an output means electrically connected to said second digital electrical computer.

2. A method for making a second financial analysis output including a second computed market-based valuation for property, the method including the steps of:

controlling a digital electrical computer processor to manipulate electrical signals in generating a market-based valuation for the property, not including any securities, the

market-based valuation reflecting at least one from a group consisting of expected return under a performance scenario, a price, and a quantitative description of risk, as part of a financial analysis output;

electronically communicating at least some of the financial analysis output as input to a second digital electrical computer having a programmed processor, the second digital electrical computer storing the input in memory accessible to the programmed processor corresponding to the second digital electrical computer;

generating the second market-based valuation for the property with the second digital electrical computer and the input; and

generating the second financial analysis output, including the second market-based valuation, at an output device electrically connected to said second digital electrical computer.

3. A method for making a second financial analysis output having a second computed market-based valuation for property, the financial analysis output being made by steps including:

controlling a digital electrical computer processor to manipulate electrical signals in generating a market-based valuation for the property, wherein the property is from a group consisting of a fixed-income asset and a portfolio of fixed-income assets, the market-based valuation reflecting at least one from a group consisting of expected return under a performance scenario, a price, and a quantitative description of risk, as part of a financial analysis output;

electronically communicating at least some of the financial analysis output as input to a second digital electrical computer having a second programmed processor, the second digital electrical computer storing the input in memory accessible to the second

programmed processor;

generating the second market-based valuation reflecting computation of a current market-based yield/discount rate for the property with the second digital electrical computer and the input; and

generating the second financial analysis output, including the second market-based valuation, at an output means electrically connected to said second digital electrical computer.

4. The method of claim 3, wherein the step of controlling is carried out with corporate debt as at least one of said fixed-income assets.

5. The method of claim 3, wherein the step of controlling is carried out with a security for debt as at least one of said fixed-income assets.

6. The method of claim 5, wherein the step of controlling is carried out with corporate debt as the debt.

7. The method of claim 3, wherein the step of controlling is carried out with a Treasury security as at least one of said fixed-income assets.

8. The method of claim 3, wherein the step of controlling is carried out with a tax-exempt security as at least one of said fixed-income assets.

9. A method for making a second financial analysis output having a second computed market-based valuation for property, the financial analysis output being made by

steps including:

controlling a digital electrical computer processor to manipulate electrical signals in generating a market-based valuation for the property wherein the property is a fixed-income asset, the market-based valuation reflecting at least one from a group consisting of expected return under a performance scenario, a price, and a quantitative description of risk, as part of a financial analysis output;

electronically communicating at least some of the financial analysis output as input to a second digital electrical computer having a second programmed processor, the second digital electrical computer storing the input in memory accessible to the second programmed processor;

the second market-based valuation reflecting computation of a current market-based yield/discount rate for the property with the second digital electrical computer and the input; and

generating the second financial analysis output, including the second market-based valuation, at an output means electrically connected to said second digital electrical computer.

10. The method of claim 9, wherein the step of controlling is carried out with a corporate debt as the fixed-income asset.

11. The method of claim 9, wherein the step of controlling is carried out with a security for debt as the fixed-income asset.

12. The method of claim 11, wherein the step of controlling is carried out with corporate debt as the debt.

13. The method of claim 9, wherein the step of controlling is carried out with a Treasury security as the fixed-income asset.

14. The method of claim 9, wherein the step of controlling is carried out with a tax-exempt security as the fixed-income asset.

15. The method of claim 1, wherein the step of controlling is carried out with the market-based valuation reflecting the expected return under a performance scenario.

16. The method of claim 2, wherein the step of controlling is carried out with the market-based valuation reflecting the expected return under a performance scenario.

17. The method of claim 3, wherein the step of controlling is carried out with the market-based valuation reflecting the expected return under a performance scenario.

18. The method of claim 4, wherein the step of controlling is carried out with the market-based valuation reflecting the expected return under a performance scenario.

19. The method of claim 5, wherein the step of controlling is carried out with the market-based valuation reflecting the expected return under a performance scenario.

20. The method of claim 6, wherein the step of controlling is carried out with the market-based valuation reflecting the expected return under a performance scenario.

21. The method of claim 7, wherein the step of controlling is carried out with the market-based valuation reflecting the expected return under a performance scenario.

22. The method of claim 8, wherein the step of controlling is carried out with the market-based valuation reflecting the expected return under a performance scenario.

23. The method of claim 9, wherein the step of controlling is carried out with the market-based valuation reflecting the expected return under a performance scenario.

24. The method of claim 10, wherein the step of controlling is carried out with the market-based valuation reflecting the expected return under a performance scenario.

25. The method of claim 11, wherein the step of controlling is carried out with the market-based valuation reflecting the expected return under a performance scenario.

26. The method of claim 12, wherein the step of controlling is carried out with the market-based valuation reflecting the expected return under a performance scenario.

27. The method of claim 13, wherein the step of controlling is carried out with the market-based valuation reflecting the expected return under a performance scenario.

28. The method of claim 14, wherein the step of controlling is carried out with the market-based valuation reflecting the expected return under a performance scenario.

29. The method of claim 1, wherein the step of controlling is carried out with

the market-based valuation reflecting the price.

30. The method of claim 2, wherein the step of controlling is carried out with the market-based valuation reflecting the price.

31. The method of claim 3, wherein the step of controlling is carried out with the market-based valuation reflecting the price.

32. The method of claim 4, wherein the step of controlling is carried out with the market-based valuation reflecting the price.

33. The method of claim 5, wherein the step of controlling is carried out with the market-based valuation reflecting the price.

34. The method of claim 6, wherein the step of controlling is carried out with the market-based valuation reflecting the price.

35. The method of claim 7, wherein the step of controlling is carried out with the market-based valuation reflecting the price.

36. The method of claim 8, wherein the step of controlling is carried out with the market-based valuation reflecting the price.

37. The method of claim 9, wherein the step of controlling is carried out with the market-based valuation reflecting the price.

38. The method of claim 10, wherein the step of controlling is carried out with the market-based valuation reflecting the price.

39. The method of claim 11, wherein the step of controlling is carried out with the market-based valuation reflecting the price.

40. The method of claim 12, wherein the step of controlling is carried out with the market-based valuation reflecting the price.

41. The method of claim 13, wherein the step of controlling is carried out with the market-based valuation reflecting the price.

42. The method of claim 14, wherein the step of controlling is carried out with the market-based valuation reflecting the price.

43. The method of claim 1, wherein the step of controlling is carried out with the market-based valuation reflecting the quantitative description of risk.

44. The method of claim 2, wherein the step of controlling is carried out with the market-based valuation reflecting the quantitative description of risk.

45. The method of claim 3, wherein the step of controlling is carried out with the market-based valuation reflecting the quantitative description of risk.

46. The method of claim 4, wherein the step of controlling is carried out with the market-based valuation reflecting the quantitative description of risk.

47. The method of claim 5, wherein the step of controlling is carried out with the market-based valuation reflecting the quantitative description of risk.

48. The method of claim 6, wherein the step of controlling is carried out with the market-based valuation reflecting the quantitative description of risk.

49. The method of claim 7, wherein the step of controlling is carried out with the market-based valuation reflecting the quantitative description of risk.

50. The method of claim 8, wherein the step of controlling is carried out with the market-based valuation reflecting the quantitative description of risk.

51. The method of claim 9, wherein the step of controlling is carried out with the market-based valuation reflecting the quantitative description of risk.

52. The method of claim 10, wherein the step of controlling is carried out with the market-based valuation reflecting the quantitative description of risk.

53. The method of claim 11, wherein the step of controlling is carried out with the market-based valuation reflecting the quantitative description of risk.

54. The method of claim 12, wherein the step of controlling is carried out with

the market-based valuation reflecting the quantitative description of risk.

55. The method of claim 13, wherein the step of controlling is carried out with the market-based valuation reflecting the quantitative description of risk.

56. The method of claim 14, wherein the step of controlling is carried out with the market-based valuation reflecting the quantitative description of risk.

57. A method for making financial analysis output including an offering document having a system-determined purchase price for property in consummating a sale, the financial analysis output being made by steps including:

converting input data representing the property, including at least one security, into input digital electrical signals representing the input data;

providing a digital electrical computer system controlled by a processor electrically connected to receive said input digital electrical signals and electrically connected to an output means;

controlling the digital electrical computer processor to manipulate electrical signals to compute the system-determined purchase price for the property in consummating a sale; and

generating the financial analysis output including the offering document at said output means.

58. A method for making financial analysis output including an offering document having a system-determined purchase price for property in consummating a sale, the financial analysis output being made by steps including:

converting input data representing the property, wherein the property includes a fixed-income asset, into input digital electrical signals representing the input data;

providing a digital electrical computer system controlled by a processor electrically connected to receive said input digital electrical signals and electrically connected to an output means;

controlling the digital electrical computer processor to manipulate electrical signals to compute the system-determined purchase price for the property in consummating a sale; and

generating the financial analysis output including the offering document at said output means.

59. The method of claim 58, wherein the step of converting is carried out with a corporate debt as the fixed-income asset.

60. The method of claim 58, wherein the step of converting is carried out with a security for debt as the fixed-income asset.

61. The method of claim 60, wherein the step of converting is carried out with corporate debt as the debt.

62. The method of claim 58, wherein the step of converting is carried out with a Treasury security as the fixed-income asset.

63. The method of claim 58, wherein the step of converting is carried out with a tax-exempt security as the fixed-income asset.

64. A method for making a financial analysis output having a system-determined purchase price for property in consummating a sale, the financial analysis output being made by steps including:

controlling a digital electrical computer processor to manipulate electrical signals in generating a market-based valuation for the property, the valuation reflecting at least one from a group consisting of expected return under a performance scenario, a price, and a quantitative description of risk, as part of a first financial analysis output;

electronically communicating at least some of the first financial analysis output including the valuation as input to a second digital electrical computer having a programmed processor, the second digital electrical computer storing the input in memory accessible to the programmed processor corresponding to the second digital electrical computer; and

generating, with the second digital electrical computer and the input, the financial analysis output having the system-determined purchase price for the property in consummating the sale.

65. The method of claim 64, wherein the wherein the controlling is carried out with the expected return under a performance scenario as part of the first financial analysis output.

66. The method of claim 64, wherein the step of controlling is carried out with the valuation reflecting the price.

67. The method of claim 64, wherein the step of controlling is carried out with the valuation reflecting the quantitative description of risk.

68. The method of claim 64, wherein the controlling includes generating the valuation for at least one security for corporate debt as the property.

69. The method of claim 65, wherein the controlling includes generating the valuation for at least one security for corporate debt as the property.

70. The method of claim 66, wherein the controlling includes generating the valuation for at least one security for corporate debt as the property.

71. The method of claim 67, wherein the controlling includes generating the valuation for at least one security for corporate debt as the property.

72. The method of claim 64, wherein the controlling includes generating the valuation for corporate debt as the property.

73. The method of claim 65, wherein the controlling includes generating the valuation for corporate debt as the property.

74. The method of claim 66, wherein the controlling includes generating the valuation for corporate debt as the property.

75. The method of claim 67, wherein the controlling includes generating the valuation for corporate debt as the property.

76. A method for making a financial analysis output having a system-determined purchase price for tangible personal property in consummating a sale, the financial analysis output being made by steps including:

controlling a digital electrical computer processor to manipulate electrical signals in generating a market-based valuation for the tangible personal property, the valuation reflecting at least one from a group consisting of expected return under a performance scenario, a price, and a quantitative description of risk, as part of a first financial analysis output;

electronically communicating at least some of the first financial analysis output including the valuation as input to a second digital electrical computer having a programmed processor, the second digital electrical computer storing the input in memory accessible to the programmed processor corresponding to the second digital electrical computer; and

generating, with the second digital electrical computer and the input, the financial analysis output having the system-determined purchase price for the tangible personal property in consummating the sale.

77. The method of claim 76, wherein the step of controlling is carried out with the valuation reflecting the expected return under a performance scenario.

78. The method of claim 76, wherein the step of controlling is carried out with the valuation reflecting the price.

79. The method of claim 76, wherein the step of controlling is carried out with the valuation reflecting the quantitative description of risk.

80. The method of claim 64, wherein the controlling includes generating the valuation for real estate as the property.

81. The method of claim 65, wherein the controlling includes generating the valuation for real estate as the property.

82. The method of claim 66, wherein the controlling includes generating the valuation for real estate as the property.

83. The method of claim 67, wherein the controlling includes generating the valuation for real estate as the property.

84. The method of claim 64, wherein the controlling includes generating the valuation for the property not including any securities.

85. The method of claim 65, wherein the controlling includes generating the valuation for the property not including any securities.

86. The method of claim 66, wherein the controlling includes generating the valuation for the property not including any securities.

87. The method of claim 67, wherein the controlling includes generating the valuation for the property not including any securities.

88. The method of claim 64, wherein the controlling includes generating the

valuation for a fixed-income asset as the property.

89. The method of claim 65, wherein the controlling includes generating the valuation for a fixed-income asset as the property.

90. The method of claim 66, wherein the controlling includes generating the valuation for a fixed-income asset as the property.

91. The method of claim 67, wherein the controlling includes generating the valuation for a fixed-income asset as the property.

92. The method of claim 64, wherein the controlling includes generating the valuation for a tax-exempt fixed-income asset as the property.

93. The method of claim 65, wherein the controlling includes generating the valuation for a tax-exempt fixed-income asset as the property.

94. The method of claim 66, wherein the controlling includes generating the valuation for a tax-exempt fixed-income asset as the property.

95. The method of claim 67, wherein the controlling includes generating the valuation for a tax-exempt fixed-income asset as the property.

96. The method of claim 64, wherein the controlling is carried out with a second member of the group, and wherein the members of the group consist of the price and

the quantitative description of risk.

97. The method of claim 96, wherein the controlling is carried out with the valuation further reflecting a risk-free rate.

98. The method of claim 96, wherein the controlling includes generating the valuation for at least one security for corporate debt as the property.

99. The method of claim 97, wherein the controlling includes generating the valuation for at least one security for corporate debt as the property.

100. The method of claim 96, wherein the controlling includes generating the valuation for corporate debt as the property.

101. The method of claim 97, wherein the controlling includes generating the valuation for corporate debt as the property.

102. The method of claim 76, wherein the controlling is carried out with a second member of the group, and wherein the members of the group consist of the price and the quantitative description of risk.

103. The method of claim 102, wherein the controlling is carried out with the valuation further reflecting a risk-free rate.

104. The method of claim 96, wherein the controlling includes generating the

valuation for real estate as the property.

105. The method of claim 97, wherein the controlling includes generating the valuation for real estate as the property.

106. The method of claim 96, wherein the controlling includes generating the valuation for the property not including any securities.

107. The method of claim 97, wherein the controlling includes generating the valuation for the property not including any securities.

108. The method of claim 96, wherein the controlling includes generating the valuation for a fixed-income asset as the property.

109. The method of claim 97, wherein the controlling includes generating the valuation for a fixed-income asset as the property.

110. The method of claim 96, wherein the controlling includes generating the valuation for a tax-exempt fixed-income asset as the property.

111. The method of claim 97, wherein the controlling includes generating the valuation for a tax-exempt fixed-income asset as the property.

112. The method of claim 64, wherein the controlling includes generating the valuation for at least one security as the property.

113. The method of claim 65, wherein the controlling includes generating the valuation for at least one security as the property.

114. The method of claim 66, wherein the controlling includes generating the valuation for at least one security as the property.

115. The method of claim 67, wherein the controlling includes generating the valuation for at least one security as the property.

116. The method of claim 96, wherein the controlling includes generating the valuation for at least one security as the property.

117. The method of claim 97, wherein the controlling includes generating the valuation for at least one security as the property.

118. The method of claim 64, wherein the controlling is carried out with the property as a component of temporally decomposed property.

119. The method of claim 118, wherein the controlling is carried out with the component as a remainder interest.

120. The method of claim 118, wherein the controlling is carried out with the component as an equity interest in a remainder interest.

121. The method of claim 118, wherein the controlling is carried out with the component as an estate for years interest.

122. The method of claim 118, wherein the controlling is carried out with the component as a term of years interest.

123. The method of claim 64, wherein the controlling is carried out with the property as a fractional interest in a component of temporally decomposed property.

124. The method of claim 123, wherein the controlling is carried out with the component as a remainder interest.

125. The method of claim 123, wherein the controlling is carried out with the component as an equity interest in a remainder interest.

126. The method of claim 123, wherein the controlling is carried out with the component as an estate for years interest.

127. The method of claim 123, wherein the controlling is carried out with the component as a term of years interest.

128. The method of claim 65, wherein the controlling is carried out with the property as a component of temporally decomposed property.

129. The method of claim 128, wherein the controlling is carried out with the

component as a remainder interest.

130. The method of claim 128, wherein the controlling is carried out with the component as an equity interest in a remainder interest.

131. The method of claim 128, wherein the controlling is carried out with the component as an estate for years interest.

132. The method of claim 128, wherein the controlling is carried out with the component as a term of years interest.

133. The method of claim 65, wherein the controlling is carried out with the property as a fractional interest in a component of temporally decomposed property.

134. The method of claim 133, wherein the controlling is carried out with the component as a remainder interest.

135. The method of claim 133, wherein the controlling is carried out with the component as an equity interest in a remainder interest.

136. The method of claim 133, wherein the controlling is carried out with the component as an estate for years interest.

137. The method of claim 133, wherein the controlling is carried out with the component as a term of years interest.

138. The method of claim 66, wherein the controlling is carried out with the property as a component of temporally decomposed property.

139. The method of claim 138, wherein the controlling is carried out with the component as a remainder interest.

140. The method of claim 138, wherein the controlling is carried out with the component as an equity interest in a remainder interest.

141. The method of claim 138, wherein the controlling is carried out with the component as an estate for years interest.

142. The method of claim 138, wherein the controlling is carried out with the component as a term of years interest.

143. The method of claim 66, wherein the controlling is carried out with the property as a fractional interest in a component of temporally decomposed property.

144. The method of claim 143, wherein the controlling is carried out with the component as a remainder interest.

145. The method of claim 143, wherein the controlling is carried out with the component as an equity interest in a remainder interest.

146. The method of claim 143, wherein the controlling is carried out with the component as an estate for years interest.

147. The method of claim 143, wherein the controlling is carried out with the component as a term of years interest.

148. The method of claim 67, wherein the controlling is carried out with the property as a component of temporally decomposed property.

149. The method of claim 148, wherein the controlling is carried out with the component as a remainder interest.

150. The method of claim 148, wherein the controlling is carried out with the component as an equity interest in a remainder interest.

151. The method of claim 148, wherein the controlling is carried out with the component as an estate for years interest.

152. The method of claim 148, wherein the controlling is carried out with the component as a term of years interest.

153. The method of claim 67, wherein the controlling is carried out with the property as a fractional interest in a component of temporally decomposed property.

154. The method of claim 153, wherein the controlling is carried out with the

component as a remainder interest.

155. The method of claim 153, wherein the controlling is carried out with the component as an equity interest in a remainder interest.

156. The method of claim 153, wherein the controlling is carried out with the component as an estate for years interest.

157. The method of claim 153, wherein the controlling is carried out with the component as a term of years interest.

158. The method of claim 96, wherein the controlling is carried out with the property as a component of temporally decomposed property.

159. The method of claim 158, wherein the controlling is carried out with the component as a remainder interest.

160. The method of claim 158, wherein the controlling is carried out with the component as an equity interest in a remainder interest.

161. The method of claim 158, wherein the controlling is carried out with the component as an estate for years interest.

162. The method of claim 158, wherein the controlling is carried out with the component as a term of years interest.

163. The method of claim 96, wherein the controlling is carried out with the property as a fractional interest in a component of temporally decomposed property.

164. The method of claim 163, wherein the controlling is carried out with the component as a remainder interest.

165. The method of claim 163, wherein the controlling is carried out with the component as an equity interest in a remainder interest.

166. The method of claim 163, wherein the controlling is carried out with the component as an estate for years interest.

167. The method of claim 163, wherein the controlling is carried out with the component as a term of years interest.

168. The method of claim 97, wherein the controlling is carried out with the property as a component of temporally decomposed property.

169. The method of claim 168, wherein the controlling is carried out with the component as a remainder interest.

170. The method of claim 168, wherein the controlling is carried out with the component as an equity interest in a remainder interest.

171. The method of claim 168, wherein the controlling is carried out with the component as an estate for years interest.

172. The method of claim 168, wherein the controlling is carried out with the component as a term of years interest.

173. The method of claim 97, wherein the controlling is carried out with the property as a fractional interest in a component of temporally decomposed property.

174. The method of claim 173, wherein the controlling is carried out with the component as a remainder interest.

175. The method of claim 173, wherein the controlling is carried out with the component as an equity interest in a remainder interest.

176. The method of claim 173, wherein the controlling is carried out with the component as an estate for years interest.

177. The method of claim 173, wherein the controlling is carried out with the component as a term of years interest.

177. The method of claim 173, wherein the controlling is carried out with the component as a term of years interest.

178. The method of any one of claims 64 to 177, wherein the consummating

the sale includes consummating the sale through a financial exchange.

179. The method of any one of claims 64 to 117, wherein the controlling is carried out with the property as a component of an other property.

180. The method of claim 179 wherein the consummating the sale includes consummating the sale through a financial exchange.

226. A method for making a financial analysis output having a system-determined purchase price for property in consummating a sale, the financial analysis output being made by steps including:

controlling a digital electrical computer processor to manipulate electrical signals in generating a valuation for the property, the valuation reflecting at least one from a group consisting of expected return under a performance scenario, a price, and a quantitative description of risk, as part of a first financial analysis output;

electronically communicating at least some of the first financial analysis output as input to a second digital electrical computer having a programmed processor, the second digital electrical computer storing the input in memory accessible to the programmed processor corresponding to the second digital electrical computer; and

generating, with the second digital electrical computer and the input, the financial analysis output having the system-determined purchase price for the property in consummating the sale.

227. The method of claim 226, wherein the step of controlling is carried out with the valuation reflecting the expected return under a performance scenario.

228. The method of claim 226, wherein the step of controlling is carried out with the valuation reflecting the price.

229. The method of claim 226, wherein the step of controlling is carried out with the valuation reflecting the quantitative description of risk.

230. The method of claim 226, wherein the controlling includes generating the valuation for at least one security for corporate debt as the property.

231. The method of claim 227, wherein the controlling includes generating the valuation for at least one security for corporate debt as the property.

232. The method of claim 228, wherein the controlling includes generating the valuation for at least one security for corporate debt as the property.

233. The method of claim 229, wherein the controlling includes generating the valuation for at least one security for corporate debt as the property.

234. The method of claim 226, wherein the controlling includes generating the valuation for corporate debt as the property.

235. The method of claim 227, wherein the controlling includes generating the valuation for corporate debt as the property.

236. The method of claim 228, wherein the controlling includes generating the valuation for corporate debt as the property.

237. The method of claim 229, wherein the controlling includes generating the valuation for corporate debt as the property.

238. The method of claim 226, wherein the controlling includes generating the valuation for tangible personal property as the property.

239. The method of claim 227, wherein the controlling includes generating the valuation for tangible personal property as the property.

240. The method of claim 228, wherein the controlling includes generating the valuation for tangible personal property as the property.

241. The method of claim 229, wherein the controlling includes generating the valuation for tangible personal property as the property.

242. The method of claim 226, wherein the controlling includes generating the valuation for real estate as the property.

243. The method of claim 227, wherein the controlling includes generating the valuation for real estate as the property.

244. The method of claim 228, wherein the controlling includes generating the

valuation for real estate as the property.

245. The method of claim 229, wherein the controlling includes generating the valuation for real estate as the property.

246. The method of claim 226, wherein the controlling includes generating the valuation for the property not including any securities.

247. The method of claim 227, wherein the controlling includes generating the valuation for the property not including any securities.

248. The method of claim 228, wherein the controlling includes generating the valuation for the property not including any securities.

249. The method of claim 229, wherein the controlling includes generating the valuation for the property not including any securities.

250. The method of claim 226, wherein the controlling includes generating the valuation for a fixed-income asset as the property.

251. The method of claim 227, wherein the controlling includes generating the valuation for a fixed-income asset as the property.

252. The method of claim 228, wherein the controlling includes generating the valuation for a fixed-income asset as the property.

253. The method of claim 229, wherein the controlling includes generating the valuation for a fixed-income asset as the property.

254. The method of claim 226, wherein the controlling includes generating the valuation for a tax-exempt fixed-income asset as the property.

255. The method of claim 227, wherein the controlling includes generating the valuation for a tax-exempt fixed-income asset as the property.

256. The method of claim 228, wherein the controlling includes generating the valuation for a tax-exempt fixed-income asset as the property.

257. The method of claim 229, wherein the controlling includes generating the valuation for a tax-exempt fixed-income asset as the property.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)
	)
Richard Graff	)
	) Group Art Unit: 2761
For: COMPUTERS MAKING FINANCIAL ANALYSIS OUTPUT HAVING PROPERTY VALUATIONS	)
	)
	) Examiner: N. Rosen
USSN: 09/134,453	)
	)
Filed: August 14, 1998	)

Certificate Under 37 CFR 1.8 (a)

I hereby certify this APPEAL BRIEF is being filed in triplicate by courier delivery addressed to the Examiner on behalf of the Commissioner of Patents and Trademarks at 2451 Crystal Drive, Building Crystal Park 5, Room 7107, 7th Floor, Arlington, VA, 22202, the courier shipment for next day delivery send on the date indicated below:

Date: October 28, 2002

Peter K. Trzyna